

Arlington Historic District Commissions

Application for Certificate

(Read attached instructions before completing form)

Appropriateness – for work described herein Minor project Major Project Demolition **Non-Applicability** – for the following reason(s): Not subject to public view Maintenance, repair, or replacement using same design and materials Proposed change specifically excluded from review under Bylaw Hardship – financial or otherwise and does not conflict substantially with the intent and purposes of the Bylaw **General Information:** Property Address 14 Jason St Owner(s) Michael Pergantis Email Lubavolkova@yahoo.com Owner's Phone (h)6172851145 (w) Owner's Address 14 Jason St Applicant (if not Owner) John F Carey/Complete Solar Applicant's Phone (h)5599679392 (w) (fax) Applicant's Address 3000 Executive Pkwy Ste 504, San Ramon, CA 94583 Applicant's Relationship to Owner Contractor Contractor John F CArey / Complete Solar Phone 5599679392 Architect Phone Dates of Anticipated Work: Start 11/1/2023 Completion **Description of Proposed Work:** (attach additional pages as necessary) Please include a description of how the proposed work (if a change or addition) is historically and architecturally compatible with the building and the District as a whole. 34 photovoltaic (PV) modules roof mounted, 12.920 KWDC **Required Documentation Acknowledgement:** (see attached instructions) ✓ I acknowledge that I am required to provide supporting documentation, including the attached "Supporting

Documents Checklist", by the deadlines indicated in the instructions. I understand that if such documents are not provided in a timely manner, this application will be considered to be incomplete and Commission action may be delayed.

I have read the attached instructions and, to the best of my knowledge, the information contained in this application is accurate and complete. I also give permission for members of the AHDC to access the property for the purpose of reviewing this application and work done under any certificate issued to me.

Owners Signature(s)	Michael Pergantis	Date: 9/15/2023

2 of AHDC 2-22-2024

Application Information and Instructions

REVIEW DESIGN GUIDELINES AND CONTACT THE COMMISSION BEFORE YOU BEGIN ANY EXTERIOR WORK WITHIN AN HISTORIC DISTRICT: Property owners in an Historic District are required to obtain a certificate from the Commission prior to starting any exterior work on buildings or structures. Applicants are encouraged to review the Commissions' Design Guidelines (available at the Commission website) prior to filing an application. Once an application is received, a formal public hearing will be scheduled to consider the application, public notice will be published, and abutters and interested parties will be notified. Please note that, by Town Bylaw, the building department cannot issue a building permit for exterior work or demolition without the necessary certificate from this Commission. Anyone contemplating exterior work should contact the Commission's Executive Secretary. Property owners are encouraged to present preliminary plans to individual Commissioners or at informal Commission hearings to better understand Commission requirements.

Types of Certificates:

Certificate of Appropriateness – Required for exterior alterations and new construction that are subject to public view unless specifically exempted by the Bylaw.

Minor Projects: doors, windows, skylights, lighting fixtures, walls, fences, HVAC and electrical equipment, gutters, and other small additions or modifications.

Major Projects: new structures, additions, projections, solar panels, and significant modifications to exterior elevations or roofs.

Demolition Projects: removal of any existing structure or portion thereof in a Historic District.

Certificate of Non-Applicability – Issued for matters that are specifically excluded from AHDC review.

Certificate of Hardship – Issued when the denial of a Certificate would constitute a hardship, financial or otherwise, on the property owner and if the proposed work does not conflict substantially with the intent and purposes of the Bylaw. Approval of a Certificate of Hardship requires detailed documentation of specific hardship to an individual property owner.

Required Documentation: At a minimum, an application for a Certificate of Appropriateness or Hardship requires the documentation specifically listed on the attached "Supporting Documentation Checklist". A Certificate of Non-Applicability requires documentation of existing conditions and proposed changes. The Commission requires one set of the documentation (preferably electronic) by the deadlines described below and seven printed sets at the hearing (3 printed sets for minor projects). A copy of the signed checklist, with the appropriate boxes checked off, must be submitted with the documentation. An application will be deemed incomplete until the required documentation has been received and reviewed by the Commission. In an emergency, required documentation can be presented at the formal hearing, however, this may delay action on the application. Based on the complexity or unique nature of a particular project, the Commission may, as allowed by law, require additional information. Failure to provide sufficient documentation could delay approval or be cause for a negative determination.

Application Deadlines: The Commission typically meets on the fourth Thursday of each month (third Thursday in November and December) at the Whittemore-Robbins House, 670R Massachusetts Avenue (behind the Robbins Library). To allow for the publishing of legally required notices prior to individual hearings, Applications must be received approximately four weeks prior to the Commission hearing date. Specific deadlines for each hearing can be obtained from the Commission's Executive Secretary. All required documentation must be provided to the Commission for its review by the following deadlines:

Minor Projects: 7 calendar days prior to scheduled hearing

Major Projects or Demolition: 14 calendar days prior to scheduled hearing

In most cases, failure to meet these deadlines will delay scheduling of a formal hearing until the following month. Upon approval of an application at a formal hearing, a certificate will be issued approximately one week from the date of the hearing and a copy will be sent to the Building Inspector to allow issuance of a permit.

Contact Information: Additional information is available at: arlingtonhistoricdistrict.com. Inquiries, applications, and supporting documentation should be directed to Carol Greeley, Executive Secretary, ahdc@town.arlington.ma.us, (781) 316-3265. Any additional questions can be addressed to the Commissions' Chair Stephen Makowka at ahdcchair@town.arlington.ma.us. CONFIRM RECEIPT FOR ALL COMMUNICATIONS TO THE AHDC.

3 of AHDC 2-22-2024

ARLINGTON HISTORIC DISTRICT APPLICATION Supporting Documentation Checklist

			Address 14 Jason St		District
			s Name Michael Per		Email Lubavolkova@yahoo.com
Ap	plic	cant'	s Phone (Day)559	9679392	(Mobile)6172851145
	Fo	r Mi	nor Projects or	Certificate of Non-A	Applicability
		Pho Ex	stographs (8x10) xisting conditions of	historic façade(s) to be	dimensioned, all materials identified) or marked up modified; Show location of proposed work; Show proposed
		Dr Ma i	rawing showing the nufacturer's liter	proposed feature(s); Site ature and specification	k and context; Drawing showing location of proposed work plan for site located equipment and features ns sheets describing the proposed feature(s) ither compatible with the District or Non-Applicable
	Fo	r Ma	ijor Projects	-	
		Ex Ne Dra	eighborhood context wings (11x17 max	; Historic precedents for	must show differentiated existing and proposed
		0	•		
		· ·	Site (showing prelationship to	adjacent roads, neighbo	s, walls, parking, HVAC equipment, electrical equipment, and ring buildings); Each floor; Roof (showing valleys, hips ats, HVAC equipment, solar panels)
		0	Foundation; Si materials; Roof		ownspouts; Shutters; Railings; Stairs; Windows; Doors; Roomets; Masonry; Light fixtures; Solar panels; HVAC equipment
		o	Wall sections (esp	pecially showing projecti	ng features such as bays, balconies, porches, additions)
		0	Relevant exterior systems)	detail drawings (archite	ctural trim, eaves, doors, windows, caps, columns, vents, rail
		0		•	nts, railings, balusters, stairs, shutters, roof trim, corner boards, and all other trim)
		o Mai	Neighborhood le existing buildir topography, adja	ng(s), setbacks, propose acent structures, major la	to lot area ratio as well as that of neighboring lots; Plot pland new structures; Site section (show relationship to site
		_		g Submittals: Model; he proposed work is c	Physical Samples ompatible with the District.
	Fo	r Dei	<u>molition</u>		
		Stat	tement of the hist	oric significance of th	eture and reason for demolition e structure Photographs of existing conditions; List existing
	_	mat	erials; Year built	; Original architect)	ped above (please list on a separate attached sheet).
An	nlia		Signature(s) Mid	Signed by:	Date: 10/10/2023
-1	L		~-8	81E5118448E	



DAVID C. HERNANDEZ,

513-418-8812



4912 Prospect Ave., Blue Ash OH 45242



davehernandezpe@gmail.com



DATE: August 31, 2023

RE: 14 Jason St, Arlington, MA 02476

To Whom It May Concern,

As per your request, Exactus Energy has conducted a site assessment of the building at the above address.

PV solar panels are proposed to be installed on roof areas as shown in the submitted plans. The panels are clamped to rails which are attached to the roof with a lagged mounting system. The PV system (PV modules, racking, mounting hardware, etc.) shall be installed according to the manufacturer's approved installation specifications. The Engineer of Record and Exactus Energy claim no responsibility for misuse or improper installation.

It was found that the roof systems satisfactorily meet the applicable code standards included in the IBC 2015,IRC 2015,IEBC 2015 and ASCE 7-10 as well as the design criteria shown below:

Design Criteria:

Risk Category = 11 Exposure Category = B

Wind speed = 127 mphGround snow load =40 psfRoof dead load = 9 psfSolar system dead load = 3 psf

Overall, the roof systems integrity is adequate to support the PV alteration with no modifications or reinforcements as required per 2015 IEBC Code Sections 402.3 and 403.3.

This letter was completed in accordance to recognized design standards, professional engineering experience, and judgement. Prior to installation, the on-site contractor must notify Exactus Energy if there are any discrepancies, or damages to the members, that was not addressed in the plan set.

If you have any further questions, please do not hesitate to contact me.

Acknowledged by:

David C. Hernandez Digitally signed by David C. Hernandez Date: 2023.09.01 07:36:01 -04:00



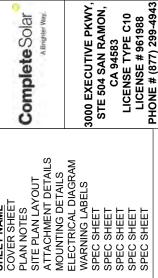
MICHAEL PERGANTIS RESIDENCE

PROJECT INFORMATION

PROPERTY OWNER NAME:

NEW PHOTOVOLTAIC ROOF MOUNT SYSTEM PROJECT - 12.920 kW DC /

9.860 kW AC





DESIGNER: OSD

PERGANTIS MICHAEL

RESIDENCE 14 JASON ST, ARLINGTON, MA 02476

ARLIM1240B0002L0004B DATE:8/25/2023 APN:

COVER SHEET SHEET

42.415518, -71.158249 COORDINATES:

AERIAL VIEW

SINGLE FAMILY RESIDENCE RESIDENTIAL

CONSTRUCTION TYPE: ZONING: WIND EXPOSURE:

DESIGN SPECIFICATIONS

ARLINGTON CITY

EVERSOURCE

JTILITY: PHONE

COMPLETE SOLAR

CONTRACTOR NAME:

APPLICABLE CODES & STANDARDS
2021 INTERNATIONAL RESIDENTIAL CODE (IRC)
2021 INTERNATIONAL BUILDING CODE (IBC)
2021 INTERNATIONAL MECHANICAL CODE (IMC)
2021 INTERNATIONAL PLUMBING CODE (IPC)
2021 INTERNATIONAL LERGRY CONSERVATION CODE (IECC)
2020 NATIONAL ELECTRICAL CODE (IECC)
2021 INTERNATIONAL FIRE CODE (IFC)

LINE SIDE TAP IN THE MSP TYPE OF INTERCONNECTION:

SCOPE OF WORK
TYPE OF SYSTEM:

ROOF MOUNT

SYSTEM SIZE:

STC; 34 X 380 W = 12.920kW PTC; 34 X 348.9 W = 11.863kW (34) SOLARIA POWER X-380R-2B (380W) [BLK] MODULE (34) ENPHASE IQ8PLUS-72-2-US MICROINVERTERS

(1) 60A KNIFE AC DISCONNECT (1) 60A FUSED AC DISCONNECT WITH 60A FUSES (1) 125A ENPHASE IQ COMBINER 4/4C BOX

MAIN BREAKER DERATE: MSP UPGRADE:

RACKING & MOUNTING

PV ATTACHMENT TYPE: UNIRAC FLASHLOC FOR COMP SHINGLE ROOF

RACKING TYPE:

UNIRAC SOLARMOUNT - ROOF MOUNT RACKING HARDWARE



3000 EXECUTIVE PKWY STE 504 SAN RAMON **LICENSE TYPE C10 LICENSE # 961988** CA 94583

PHONE # (877) 299-4943

DESIGNER: OSD

- ACAMING HAWAWARE RINSTALLATION SOLARIA POWER X-380R-28R
 ACAMING HAWAWARE RESTALLATION SOLARIA POWER X-380R-28R
 11.58 WODDLUE S HENHASE IGREUUS-72-24US MICROINVERTERS.
 11.68 PV SYSTEM WIRNING TO RADOMONITED JUNCTION BOX
 11.18 PV SYSTEM WIRNING TO RADOMONITED JUNCTION BOX
 11.18 PV METERING MONITORING (IF INCLUDED)
 11.19 PV DISCONNECTO CERTERS (INCLUDED)
 11.10 PV DISCONNECTO CERTERS (INCLUDED)
 11.11 PV LAD COMMING ELECTRODE & BONDING TO (E) GCC
 12.11 PV FIAL COMMING TELETROPIE REPORTIFOR PV
 12.2 (E) ELECTRODE LOUPMINT RETROPITEOR PV
 12.3 SIGNAGE PLACED IN ACCORDANCE WITH LOCAL BUILDING CODE
 14.44 SITE MOTES.
 14.40DER WILL BE IN PLACE FOR INSPECTION IN COMPLIANCE WITH OSHA
 - WILL BE IN PLACE FOR INSPECTION IN COMPLIANCE WITH OSHA
- 1.14. 1.15. 1.17. 1.18. 1.22. 1.22. 1.23. 1.25.
- 1.27.
- REQUIATIONS

 THE MADDLES ARE CONSIDERED NON-COMBUSTIBLE AND THIS SYSTEM IS A UTILITY UNTERACTIVE SYSTEM WITH NO STORAGE BATTERIES.

 THE SOLAR PAY INSTALLITON WILL NOT OBSTRUCT ANY PLUMBING, MECHANICAL, OR BUILDING ROOF VENTS.

 MECHANICAL, OR BUILDING ROOF VENTS.

 PROPER ACCESS AND WORKING CLEARANCE AROUND EXISTING AND PROPOSED ELECTRICAL EQUIPMENT WILL BE PROVIDED AS PER SECTION 1.28.
 - ROOF COVERINGS SHALL BE DESIGNED, INSTALLED, AND MAINTAINED IN ACCORANGE WHITH THIS CODE AND THE APPROVED MANUFACTURER'S INSTRUCTIONS SUCH THAT THE ROOF COVERING SERVES TO PROTECT THE BUILDING OR STRUCTURE.

- 1.57.
- 1.56. EACH MODULE WILL BE GROUNDED USING WEEB GROUNDING CLIPS AS SHOWN IN MANUFACTURER DOCUMENTATION AND APPROVED BY THE SHOWN IN MANUFACTURER DOCUMENTATION AND APPROVED BY THE INSTALLED ATTHE SECTION GOODULE GROUNDING LOUGH SPER THE MANUFACTURERS IN STALLTION REQUIREMENTS.

 1.57. THE GROUNDING CONNECTION TO A MODULE SHALL BE REPRANCED SUCH THAT THE REMOVAL OF A MODULE DOES NOT INTERRUPT A GROUNDING CONNECTION TO ANOBOLIC BOSES IN SILL AND THE REMOVAL OF A MODULE DOES NOT INTERRUPT A GROUNDING CONDUCTOR TO ANOTHER MODULE.

 1.68. GROUNDING AND BONDING CONDUCTORS IF INSULATED, SHALL BE COLORED GREEN OF MANUFACTOR TO ANOTHER MODION OF LARGER THE COOLDED GREEN OF A MODIFIED SYSTEM COMPLIES WITH HEC 690 AT AND MODION OF SYSTEM COMPLIES WITH HEC 690 AT AND MODION OF SYSTEM COMPLIES WITH HEC 690 AT AND MODION OF SYSTEM COMPLIES AND MODION OF A COORDING ON THE CROON OF A CAN AND A CAN AND THE CROON OF 1.58.
 - GROUND-FAULT DETECTION SHALL COMPLY WITH NEC 690.5 IN GENERAL AND NEC 690.5 (A)(1) SPECIFICALLY. 1.60.

1.61.

- UPPER TERMINALS). DISCONNECTS TO BE ACCESSIBLE TO QUALIFIED UTILITY PERSONNEL, BE DISCONNECTION AND OVER-CURRENT PROTECTION NOTES:
 DISCONNECTING SWITCHES SHALL BE WRED SUGH THAT WHEN THE
 SWITCH IS OPENED THE CONDUCTORS REMAINING EMERGAZED ARE
 CONNECTED TO THE TERMINALS MARKED 'LINE SIDE' (TYPICALLY THE 1.63.
 - 164. COCRABLE, AND BE A VISIBLE SHEAK SWITCH
 164. ARAPI OS HUTDOWN OF PERKERGIZED COMDUCTORS BEYOND 10 FT OF PV
 ARAZY OR S FT NISIDE A BULDING WITHIN 10 SECONDL CONTROLLED
 CONDUCTORS SSON AND 2240VA [NEC 890.12], LOCATION OF LABEL
 ACCORDING TO AHU
 165. ALL OCPE NATINGS AND TYPES SPECIFIED ACCORDING TO NEC 890.8,
- 1.66. MICROINVERTER BRANCHES CONNECTED TO A SINGLE BREAKER OR GROUPED FUSES IN ACCORDANCE WITH NEC 110.3(B). 1.67. IF REQUIRED BY AHJ, SYSTEM WILL INCLUDE ARC-FAULT CIRCUIT PROTECTION ACCORDING TO NEC 690.11 AND UL.1699B.

1.68. ELECTRICAL INTERCONNECTION NOTES: 1.69. THE SUM OF THE UILLITY OCDD AND INVERTER CONTINUOUS OUTPUT MAY TOTE EXCEED 1.20%, OF THE BUSBAR RA,TING.

- 1.70.
- THE SOMEN THE UTILITY OF AUCUMENT ENCOUS NOTIFICIOUS TO THE SOMEN THE USBAR RATING.
 WHEN THE SIM OF THE WESDARGA RATING.
 WHEN THE SIM OF THE WESDARGA REGULES + 100% OF THE BUSBAR RATING, TO DEDICATED BACKFEED BREAKES MUST BE LOCATED OPPOSITE END OF THE BUS FROM THE UTILITY SOURCE GCPD.
 AT MULTIPLE PO VIDITY OLOMBINER POWEL, THE TOTAL RATING OF ALL BUSBAR. THE TOWN THE MEST PROCESS THE AMBACHTY OF THE BUSBAR. HOWEVER, THE COMBINED OVERCURRENT DEVICE MAY BE 1.71.
 - SUPPLY-SIDE TAP INTERCONNECTION SHOULD BE WITH SERVICE ENTRANCE CONDUCTORS. 1.72.
- 1.73. BACKFEEDING BREAKER FOR UTILITY-INTERACTIVE INVERTER OUTPUT IS EXEMPT FROM ADDITIONAL FASTENING.

RESIDENCE MICHAEL

14 JASON ST, ARLINGTON, MA 02476

ARLIM1240B0002L0004B DATE:8/25/2023 APN:

PLAN NOTES SHEET

PROJECT NOTES: THIS PROTOCULAGE (PV) SYSTEM SHALL COMPLY WITH THE NATIONAL THIS PROTOCULAGE (PV) SYSTEM SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE (REC) ARTICLE 600 ALL NAWIVEACTURERSES LISTING AND INSTRULATION INSTRUCTIONS AND THE RELEVANT CODES AS SPECIFIED BY THE ALITHORITY HAWING JURISDICTIONS (AHJ) APPLICABLE CODES. THE ALITHORITY WIRESCEND SHOWN TO PARALLEL OPERATION OROUNDS FALL TEEFTER TOWN WIN TERREPTION OR SOUNDS FALL TEEFTER TOWN WIN TERREPTION RECEPTION WIN THE MICRORIVERTER IN ACCORDANCE WITH MEC

- EQUIPMENT LOCATIONS: ALL EQUIPMENT SHALL MEET MINIMUM SETBACKS AS REQUIRED BY NEC
- 132. WIRNOS SYSTEMS INSTALLED IN DIRECT SUNLIGHT MUST BE RATED FOR EXPECTED OPERATIVE TRANSPECTIVE AS SPECIFIED BY NEC 690.31 (A).(C) AND NEC TABLES 310.16 (B)(2)(A) AND 310.15 (B)(3)(C) AND NEC TABLES 310.16 (B)(2)(A) AND 310.15 (B)(3)(C) AND NET OF 690.34. ACCORDING TO NEC 690.34. ACCORDING TO NEC 690.34. ADDITIONAL AC DISCONNECTICS SHALL BE PROVIDED WHERE THE INVERTIFET IS NOT WITHIN SIGHT OF THE AC SERVING DISCONNECTI. 135 ALL COUPMENT SHALL BE INSTALLED ACCESSIBLE TO QUALIFIED PERSONNEL ACCORDING TO NEC APPLICABLE CODES. 136. ALL COMPONENTS ARE LISTED FOR THEIR PURPOSE AND RATED FOR OUTDOOR USAGE WHEN APPROPRIATE.

690.5(A) ALL PV SYSTEM COMPONENTS; MODULES, UTILITY-INTERACTIVE

1.5

1.6. 1.7.

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- 1.37. STRUCTURAL NOTES:
 1.38. RACKINGS SYSTEM
 1.39. PARRAY WILL BE NOTALLED ACCORDING TO CODE-COMPLIANT
 1.39. PARRAY WILL BE NOTALLED ACCORDING TO CODE-COMPLIANT
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 ACCORDING TO RAIL MANUFACTURERS INSTRUCTIONS,
 1.40. AND TO RAIL MANUFACTURERS INSTRUCTIONS,
 SPECIFICATIONS IF ROOF-PENETRATING TYPE, IT SHALL BE FLASHED
 1.40. FROOTED PENETRATIONS FOR PACEMAY WILL BE COMPLETED AND
 1.42. ROOFIDD PENETRATIONS FOR PACEMAY WILL BE COMPLETED AND
 1.43. ROOFIDD PENETRATIONS FOR PACEMAY WILL BE COMPLETED AND
 1.44. ROOFIDD PENETRATIONS FOR PACEMAY WILL BE COMPLETED AND
 1.45. ROOFIDD PENETRATIONS FOR PACEMAY PER CODE BY A LICENSED

- CONTRACTOR

 143 ALL PV RELATED ROOF ATTACHMENTS TO BE SPACED NO GREATER THAN
 THE SPAN DISTANCE SPECIFED BY THE RACKING MANUFACTURER
 144. WHEN POSSIBLE, ALL PV RELATED RACKING ATTACHMENTS WILL BE
 STAGEED AMONGST THE ROOF FRAMING MEMBERS.

- 1.46. WIRING & CONDUIT NOTES:
 1.46. ALL CONDUIT AND WIFE WILL BE LISTED AND APPROVED FOR THEIR PURPOSE. CONDUIT AND WIFE WILL BE LISTED AND ARE BASED ON MINIMUM COOP ERQUIFEMENTS AND PARE NOT MEANT TO LIMIT POSEING.
 1.47. CONDUITORS SIZEDA ACCORDING TO NEC 6803. NEC 6803.7.
 1.48. OUT TAGE DROE LIMITED TO MODULE FOOTPRINT, MICROINVERTER WIRING 1.49. DC WIRING LIMITED TO MODULE FOOTPRINT, MICROINVERTER WIRING SYSTEMS SHALL BE LOCATED AND SECURED UNDER THE ARRAY WITH

WORK INCLUDES:
PV ROOF ATTACHMENTS - UNIRAC FLASHLOC FOR COMP SHINGLE ROOF.
PV RACKING SYSTEM INSTALLATION - UNIRAC SOLARMOUNT ROOF MOUNT
RACKING HARDWARE

PRIME CONTRACTOR WILL BE RESPONSIBLE FOR COLLECTING EXISTING OWSITE REQUIREMENTS TO DESIGN, SPECIFY, AND INSTALL THE EXTEROR ROOF-MOUNTED PORTION OF THE PHOTOVOLTAIC SYSTEMS DETAILED IN THIS DOCUMENT. SCOPE OF WORK: PRIME COUNTACTOR IS RESPONSIBLE FOR THE DESIGN AND PRIME COUNTACTOR SPERIOR THE GRID-TIED PHOTOVOLTALC SYSTEM RETROFIT.

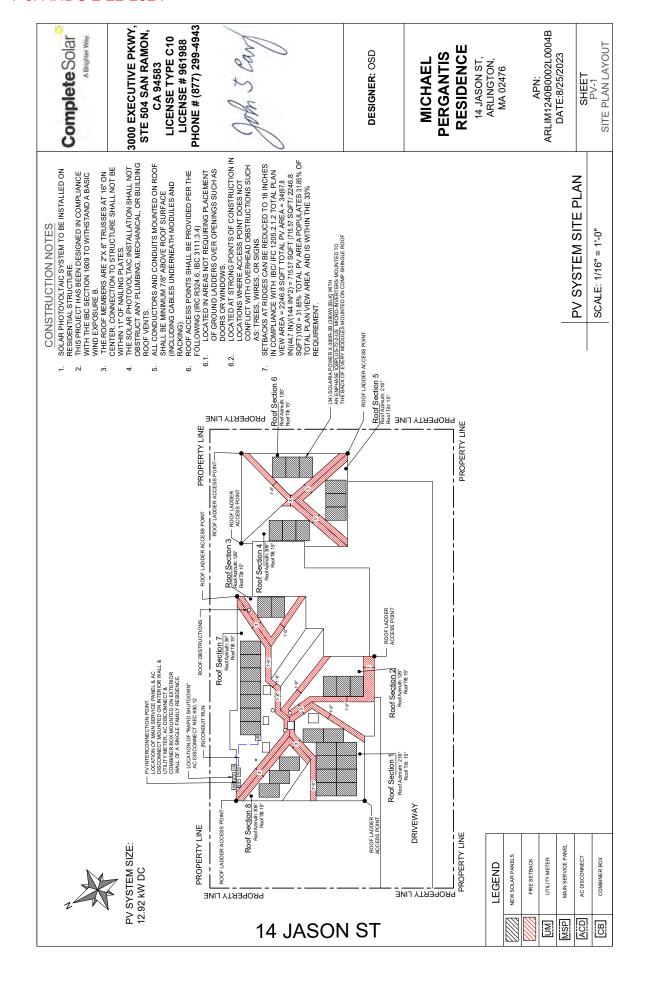
1.10 1.10

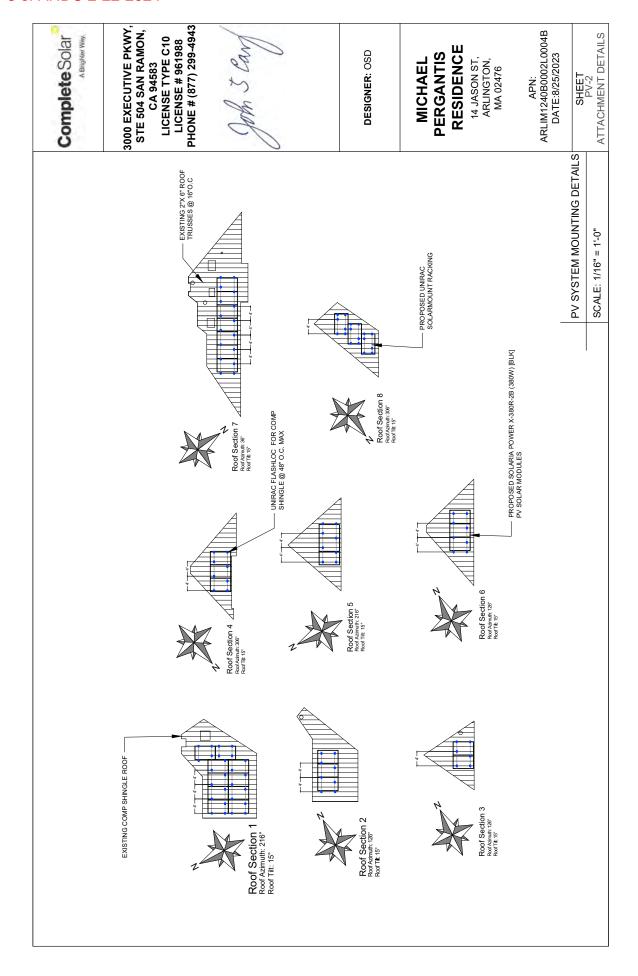
1.8

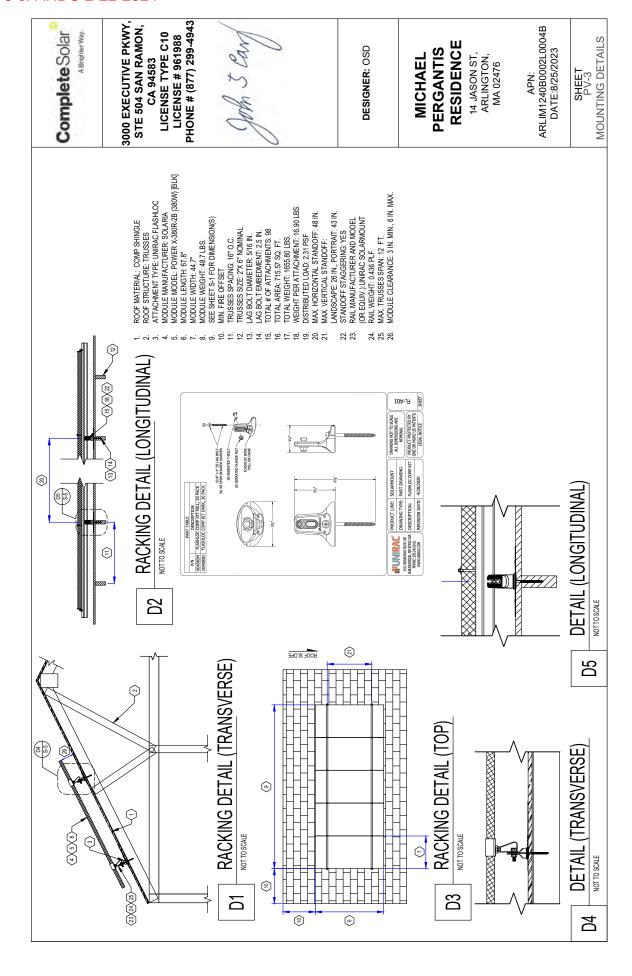
SUITABLE WIRING CLIPS
AC CONDUCTORS COLORED OR MARKED AS FOLLOWS: PHASE A OR L1BLACK PHASE B OR L2. RED, OR OTHER CONVENTION IF THREE PHASE
PHASE C OR L3. BLUE, "YELLOW, ORANGE". OR OTHER CONVENTION
NEUTRAL. WHITE OR GREY IN 44WIRE DELIA CONNECTED SYSTEMS THE
PHASE WITH HIGHER YOLT AGE TO BE MARKED DORANGE [INC 110.15 1.50.

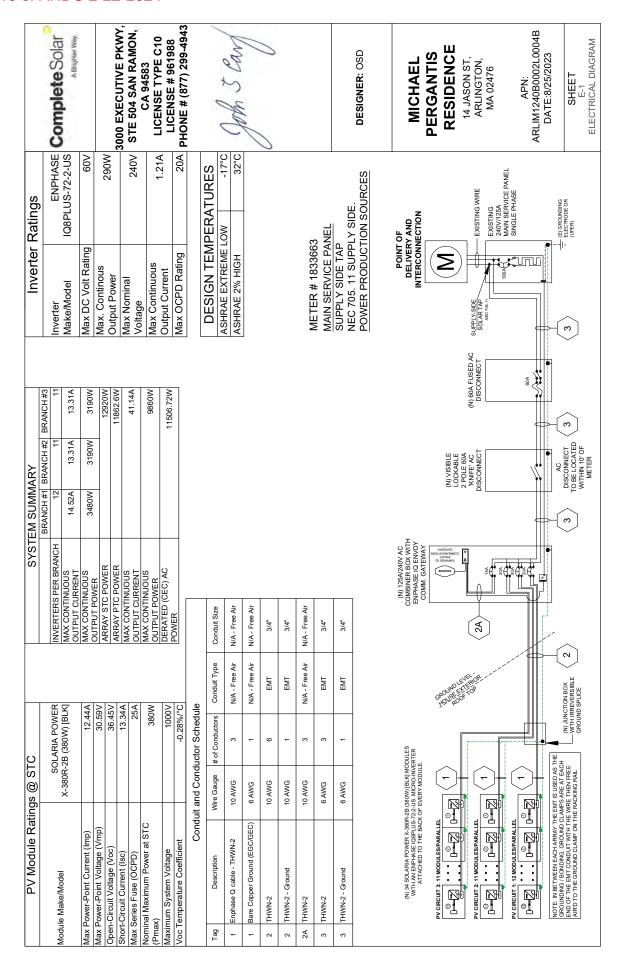
- GROUNDING NOTES: GROUNDING SYSTEM COMPONENTS SHALL BE LISTED FOR THEIR PROPOSE, AND GROUNDING DEVISES EXPOSED TO THE ELEMENTS SHALL
- POR COSE, MAY EXCONDING TO THE CORD OF THE COST OS THE COST OF THE COST OS THE

PERGANTIS









A Brighter Way

POWER TO THIS BUILDING IS

FOLLOWING SOURCES WITH ALSO SUPPLIED FROM THE

DISCONNECTS AS SHOWN

Complete Solar

3000 EXECUTIVE PKWY

STE 504 SAN RAMON, **LICENSE TYPE C10**

CA 94583

WARNING

ELECTRICAL SHOCK HAZARD

TERMINALS ON LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION LABEL LOCATION:
INVERTER(S), AC
COMBINER PANEL (IF APPLICABLE).
PER CODE(S); NEC2020: 690.13(B), 8,
706.15(C)(4)

RAPID SHUTDOWN SWITCH FOR SOLAR PV SYSTEM

LABEL LOCATION:
UTILITY SERVICE ENTRANCE/METER,
UTILITY SERVICE ENTRANCE/METER,
LOCAL AHJ, OR OTHER LOCATIONS AS REQUIRED
BY LOCAL AHJ,
PER CODE(S), NECZOZO : 690.56(c)(2)

WARNING

POWER SOURCE OUTPUT CONNECTION DO NOT RELOCATE THIS **OVERCURRENT DEVICE**

LABEL LOCATION:
ADJACENT TO PV BREAKER AND ESS
OCPD (IF APPLICABLE).
PER CODE(S): NEC2020: 705.12(B)(3)(2),

|| WARNING

THIS EQUIPMENT FED BY MULTIPLE SOURCES. TOTAL RATING OF ALL OVERCURRENT DEVICES, EXCLUDING MAIN SUPPLY OVERCURRENT DEVICE, SHALL NOT EXCEED AMPACITY OF BUSBAR

LABEL LOCATION: MAIN SERVICE PANEL (IF APPLICABLE). PER CODE(S): NEC2020 : 705.12(B)(3)(3)

COMBINER PANEL DO NOT PHOTOVOLTAIC SYSTEM

PHONE # (877) 299-4943

(N) SOLAR PANELS AND MICRO-INVERTERS ON ROOF

14 JASON ST

LICENSE # 961988

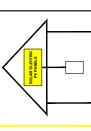
LABEL LOCATION: PHOTOVOLTAIC AC COMBINER (IF APPLICABLE).

NOMINAL OPERATING AC VOLTAGE: 240.0 VAC MAXIMUM AC OPERATING CURRENT: 41.14 AMP: PHOTOVOLTAIC AC DISCONNECT

LÁBEL LOCATION:
AC DISCONNECTIS), PHOTOVOLTAIC SYSTEM POINT OF
INTERCENCETION.
PER CODE(S): NEC2020: 690.54

SOLAR PV SYSTEM EQUIPPED WITH RAPID SHUTDOWN

SWITCH TO THE "OFF"
POSITION TO SHUT DOWN
PV SYSTEM AND REDUCE
SHOCK HAZARD IN THE TURN RAPID SHUTDOWN



LABEL LOCATION:
ON OR NO MORE THAT 3 M (10 FT) FROM THE SERVICE DISCONNECTING
ON OR NO WHICH THE PAY SYSTEMS ARE CONNECTED
PER CODE(S): NEC2020: 690.56(C), NEC 2017: 690.56(C)(1)(a)

ARLIM1240B0002L0004B APN:

SHEET

WARNING LABELS

DATE:8/25/2023

DESIGNER: OSD

LOCATION OF MAIN SERVICE PANEL, UTILITY METER, TWO AC DISCONNECTS & COMBINER BOX. PV INTERCONNECTION POINT

RESIDENCE **PERGANTIS** MICHAEL

14 JASON ST, ARLINGTON, MA 02476

REQUIREMENTS WITH LOCAL AN JEEFORE NSTALLATION
ALL PAOUSE AND ISOMAGE RECURRICAL CODE
ALL PROMES BOUNGE POTHER WITH CORP LASTIC ENGRAND OR MACHINE
PRIVATE JETHER TO NOT A CONTRASTING COLOR TO THE PLAQUE. THIS PLAQUE WILL BE ATTICHED BY POP
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NOT ALL PLACARDS SHOWN MAY BE REQUIRED BY LOCAL AHJ. CONTRACTOR TO VERIFY PLACARD

PERMANENT SIGNAGE NOTES:

RIVETS OR SCREWS OR OTHER APPROVED METHOD.
DIRECTORPY TACARD MARKING CONTIENT AND FORMAT: RED BACKROUND WHITE LETTERING;
MAINJUN 38"LETTER HEGHT, ALL CAPITAL LETTERS, ARALO RS SIMLAR FONT, NON BOLD, REFLECTIVE
WANNETHER RESISTANT MATERIAL SUITABLE FOR THE ENVIRONMENT.

A Brighter Way

Solaria PowerX | DC Panel

SOLARIA

Solaria PowerX-380R-2B



Achieving over 19.4% efficiency, Solaria PowerX Performance solar panels feature Solarias cover cell cutting feature language and additational balbok on-black eastherins compared in conventional solar panels. Solaria has been the market leader in out-cell technologies for over a decade. With a comportensive 25-year

warranty, PowerX delivers the latest in power and reliability for homeowners

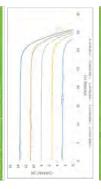
At 380 watts and 19.4% efficiency, Solaria PowerX solar panels are one of the highest power residential panels available.

High Efficiency, High Power

State-of-the art cell cutting technology and advanced panel construction ensure that PowerX panels are highly reliable and designed to far exceed the industry-leading 25-year.

High Quality and Reliability

Open Circuit Voltage (Voc) Short Circuit Current (Inc) Max Power Voltage (Vmp) Max Power Current (Ing)	Σ	
Short Circuit Current (Isc.) Max Power Voltage (Vmp) Max Power Current (Ire.)		
Max Power Voltage (Vmp) Max Power Current (Imp)	[v]	
Max Power Current (Ing.)	Σ	
	[A]	
Temperature Characteristics		
NOCT	[04]	Н
Temp. Coeff. of Pmax	[% / %]	
Temp. Coeff. of Voc	(3,7%)	
Temp. Coeff. of Isc	[%/ °C]	
Design Parameters		
Operating temperature	lac!	17
Max System Voltage	Σ	
Max Fuse Rating	[A]	
Bypass Diodes	1	





Complete Solar

PHONE # (877) 299-4943 3000 EXECUTIVE PKWY STE 504 SAN RAMON, **LICENSE TYPE C10 LICENSE # 961988** CA 94583

Illack Anodized Abusinum 12 AWG PV Wire (UL) /1100mm

Frame Type Cable Type / Length

Junction Box

Cell Type

Moneurystalline Silvicon

Dimensions (L x W x H)

1723mm x 113m x 35mm

Meight

72 4 kg / 4ft 7 lbs

Glass Type / Thickness

AR Coated, Tempered / 3 2mm



UL 61730 / IEC 61215 / IEC 51730

25 ym65°

Fire Type (UL 1703) er, Parte & Labo

2400 Pa / 50 psf* IP68 / 3 diodes

89.5" v 44.3" s 50.0" 1765mm s 1125mm = 1270mm

Panels/ Pallet

692 kg / 1525 lbs

908

Pallets / 40-tt contene-

Pallet Weight

DESIGNER: OSD

RESIDENCE **PERGANTIS** MICHAEL

14 JASON ST, ARLINGTON, MA 02476

ARLIM1240B0002L0004B DATE:8/25/2023 APN:

Capyright © 2023 The Solaria Corporation SOL-DAT-0012 Rev 04 6-2023

1.3mm 1.3mm 1.3mm 1.2mm 1.2mm 1.3mm 1.3mm

SHEET

SPEC SHEET

The Solaria Corporation 45700 Northport Loop East, Fremont, CA 94538 P. (510) 270-2807 Product specifications are subject to change without notice.

Copyright © 2023 The Solaria Corporation SOL-DAT-0012 Rev 04 6-2023 www.solaria.com

PowerX maintains high efficiency at low irradiance further ensuring maximum energy yield. Low Light Performance

Sub-strings are interconnected in parallel, which dramatically lowers the shading losses and boosts energy yield.

Improved Shading Tolerance

Solaria PowerX solar panels produce more power per square

0

Best System Value

meter area. This reduces installation costs due to fewer

balance of system components.

Compared to conventional panels, Solaria PowerX panels

All Black Aesthetics

have a more uniform all-black appearance.

A Brighter Way

Complete Solar

3000 EXECUTIVE PKWY

STE 504 SAN RAMON,

CA 94583

LICENSE TYPE C10

LICENSE # 961988

⊕ ENPHASE.



IQ8 Series Microinverters

Our newest IOB Microinverters are the industry's first microgrid-forming, software-defined microinverters with spiral-pass power conversion expallity to convert DC power to AC power efficiently. The brain of the seniconductor-based microinverts is our propriet by CA power efficiently. The brain of the seniconductor-based microinverter to cour propriet by application-respecific integrated circuit (ASIOI) which enables the is our propriet by a special or fight effect of the spiral micrower to report the ingli-fact of or fight micrower to report is built in advanced. Somm technology with high speed digital logic and has super-fast response times to changing loads and grid events, alleviating constraints on battery sizing for home energy systems.



More than one million cumulative hours of testing

Class II double-insulated

Optimized for the latest high-powered PV modules

High productivity and reliability

Faster installation with simple two-wire cabling

Lightweight and compact with plug-n-play connectors

Easy to install

Power Line Communication (PLC) between components

Part of the Enphase Energy System, IQ8 Series Microinverters integrate with the Enphase IQ Batteny, Esphase IQ Gateway, and the Enphase App monitoring and analysis software.

© 2022 Enphase Energy. All rights reserved. Enphase, the Enphase logo, IQB I names are trademarks of Enphase Energy, Inc. Data subject to change.

IQ8SE-DS-000I-01-EN-US-2022-03-17



Connect PV modules quickly and easily to IQB Series Microinverters using the included G-DCC-2 adapter cable with plug-n-play MC4 connectors.

Configurable to support a wide range of grid profiles.

Meets CA Ruie 21 (UL 1741-SA) requirements

Remote automatic updates for the latest grid requirements

 Compiles with the latest advanced grid support** Microgrid-forming

• Only when installed with IO System Controller 2, meets Un 1741, IOBH-2084 operates only in grid-tied mode. • 108 Series Microinvertors supports split phase, 240V, IOBH-208 supports split phase, 240V,

IQ8 Series Microinverters

THE SAME

NEWT DATA (DC)		100-66-2-05	1015-12-2+05	1004-72-2-65	(\$18.4-72-2-45	QUEX-240-72-0-05 1000-2000-72-05(100H-210H-72-455
Commonly used module pairings?	*	235 - 350	235 - 640	280 - 460	295 - 500	320 - 540+	295 - 500+
Module compatibility	9	60-cell/120 half-cell		60-cell/120 half-cell.	6-cell/132 half-cell	60-cell/120 half-cell, 66-cell/132 half-cell and 72-cell/144 half-cell	
MPPT voltage range	0	27 - 37	29-45	33-48	36 - 45	38-45	38-45
Operating range	3	25-48			25-58		
Min/max start voltage	>	30748			30/36		
Maximplet DC voltage	>	90			09		
Max DC current ² [module lsc]	4				0		
Overvoltage class DC port					į		
DC port backfeed current	10				0		
PV array configuration		by Ungrounded a	rray: No additional	XC side protection requ	ired; AC side protect	Int Ungrounded array. No additional DC side protection required; AC side protection requires may 20% per branch proui	tranch pirous
SUTPUT DATA IACI.	ı	108-80-2-1/3	Manual 12-2-US	1034-72-2-45	(08A-72-2-US	108H-240-72-2-US (38H-208-72-4-US	(48H-208-72-2-U)
Peak output power	5	245	300	330	366	384	366
Max continuous output power	ĸ	240	290	325	349	380	360
Nominal (L-L) voltage/tange*	54			240 / 211 - 264			208 / 163 - 250
Max continuous output current	V	10	173	135	145	158	173
Nominal frequency.	RE			9	90		
Extended frequency range	2			90	89 - 09		
AC short timust fault parrent over 3 cycles	fine			e			4,4
Max units per 20 A (L-L) branch circuit?	-	36	р	e	e	9	ď.
Total hamonic distortion				y	- No		
Dvervortage class AC port					. 0		
AC port backfeed current	7			2	30		
Power factor setting					10		
Orid-tied power factor (adjustable)				0.85 leading	0.85 leading - 0.85 lagging		
Peak efficiency	y.	97.5	97.9	97.6	97.6	97.6	97.4
CEC weighted efficiency	*	187	- 60	78	97.5	49.	40
Night-time power consumption	Mil				90		11
NECHANICAL DATA					l		Ž.

PHONE # (877) 299-4943

CA Rule 21 (UL 1741-SA), UL 62109-1, ULT/41/IEEE IS47, FCC Part 15 Class B, ICES-0003 Class B, CAN/CSA-C22.2 NO. 1073-01	CA Rule 21
	COMPLIANCE
NEWA Type 6 / outdoor	Environ, category / UV exposure rating
Class 8 double-insulated, corrosson relatint polymeric enclosure	Enclosure
PD3	Poliution degree
7.	Approved for wet locations
Natural convection - no fare	Cooling
1.08 kg (2.38 lbs)	Weight
212 mm (6.3") x (75 mm (6.9") x 30.2 mm (1.2")	D(mensions (HxWaD)
MG4	DC Commetter Type
4% to 100% (constansing)	Relative humidity range
-4D°C to +6D°C (-40°F to +540°F)	Ambient temperature range

The product is Ut. Listed as PV Rapid Shut Down Equipment and conforms with NEC 2014, NEC 2017, and NEC 2020 or The Conformation of the Conformation of PV Systems, for AC and De Conductors, when installed according to the Institutions. (1) The ICBH-208 waterst will be operating in grid-ted mode only at 208V AC. (2) No enforced DC/MC ratio. See the correctional control and the statement ordinations input to compatibility obtained in estimations input a Court ratio (10.4 M Normin Voltage may each be extended beyond norminal frequired by the utility (5). Limits may vary. Relet to local requirements to define the number of microinverts por branch the operation.

DESIGNER: OSD

RESIDENCE **PERGANTIS** MICHAEL

14 JASON ST, ARLINGTON, MA 02476

ARLIM1240B0002L0004B DATE:8/25/2023 APN:

S-2 SPEC SHEET SHEET

IQ8SE-DS-0001-01-EN-US-2022-03-17

Data Sheet Enphase Networking

1Q Combiner 4/4C Enphase

X-IQ-AM1-240-4 X-IQ-AM1-240-4C



residential applications. It offers up to four 2-pole input circuits and Eaton BR series busbar assembly.

providing a consistent, pre-wired solution for

microinverters and storage installations by

into a single enclosure and streamlines IQ

consolidates interconnection equipment

- Includes IQ Gateway for communication and control includes Enphase Mobile Connect cellular modem (CELLMODEM-M1-06-SP-05), included only with IQ
- Includes solar shield to match Enphase IQ Battery

 - aesthetics and deflect heat
 - Flexible networking supports WI-Fi, Ethernet, or cellular Optional AC receptacle available for PLC bridge Provides production metering and consumption

Simple

- Centered mounting brackets support single
- stud mounting

 Supports botrom, back and side conduit entry
 Up to four 2-pole branch circuits for 240 VAC
 plug-in breakers (not included)

 SIDA total PV or storage branch circuits

Reliable

Durable NRTL-cartified NEMA type 3R enclosure Five-year limited warranty
 Two years labor reimbursement program coverage included for both the IQ Combiner SKU's
 UL listed



XRQ-AM1-240-4
XRQ-AM1-240-4
To beam more about Enphase offerings, visit amphase.com

Enphase IQ Combiner 4/4C

CD Conserve who for proteins of conserved electron band for unexpensation or and in Virgons conserved with the CD SI and recommendation or VII To VIII TO VIIII TO VIII TO VII	(2) Combined, with Explained (Designation from plant of the properties of the proper
240·4) 10 23 60	12-40-4C) 19 (A

IQ Combiner 4C (X-IQ-AN

The Enphase IQ Combiner 4/4C with Enphase

modem (included only with IQ Combiner 4C)

IQ Gateway and integrated LTE-M1 cell

ORIES AND REPLACEMENT PARTS (not included, order separately)	(not included, order separately)
Dominion No. 11 To 11 To 12 To	 Includes COMME-RT-01 and CELLMODEM Mit-09-80-019 with it-year Semicitaria nitra from Emergedy littles. Aud Stead ST EM, Conlider modern, with Syear Sporint date glan- sed Desert UT-841 cellular modern, virit Syear ATAT was glain.
akers 2-240V	Supports Eaton BR210, BR215, BR220, BR230, BR240, BR250, and BR260 circuit breakers. Circuit breaker, 2 pole, 10A, Eaton BR210

Example Dommanications Kit COMMS CRILI MODEM M 196 CELL MODEM M 196 KP US CELL MODEM M 1 406 M 196	Findering CMMAR, RT OT and CELLADGEM MH OH-SP off with it years Sprentistial related for Entire CELLAGEM CONTRACT CONTR
Circuit Breakers BRK-104-2240V BRK-204-2240V BRK-204-29-240V BRK-204-29-240V BRK-204-29-240V-8	Supports Earns 1821 (1927), 878-878 (1922.0, 878-874), 878-879, and 872-90 citruit breakers. Closel the beaker, 2 pole, 1, N.E. Earns 1827(1) Citruit beaker, 2 pole, 1, N.E. Earns 1827(1) Citruit beaker, 2 pole, 1, N.E. Earns 1827(1) Citruit beaker, 2 pole, 3, N.E. Earns 1822(1) Citruit beaker, 2 pole, 1, N.E. Earns 1822(1) with hold down let support Citruit beaker, 2 pole, 1, N.E. Earns 1822(1) with hold down let support Citruit beaker, 2 pole, 3, N.E. Earns 1822(1) with hold down let support
EPIC-01	France the carries (continued like tedge pair); quantitly, use bain
XA-SOLARSHIELD-ES	Replacement solar shield for IQ Combiner 4/4C
30A, PUSG 120-3	Accessory reciplace for Power Line Carrier to 10 Coprobinity \$740(regument for \$PUC-0))
XA-ENV-PCBA-3	Replacement IQ Gateway printed circuit board (PCB) for Combiner 4/4C
NIG-MAHD-125A	Hold down fit for Ealon circuit breaker, mith screwn.
ELECTRICAL SPECIFICATIONS	
Rating	With michinal and
System voltage	120/240 VAC, 60 Hz

PHONE # (877) 299-4943

STE 504 SAN RAMON,

LICENSE TYPE C10 LICENSE # 961988

CA 94583

System voltage	120/240 VAC, 60 Hz
Extor BR extres building	126.8
Max. continuous current rating	65A
Man, yourumanay yourum british Count forms (Winserngh)	N/N
Max. fuse/circuit rating (output)	90 A
Branch divasits (ablar and/or stronge)	Option found power layour (in system plantificated Conversion (IDO) branks any line included to
Max. total branch circuit breaker rating (input)	80A of distributed generation / 95A with IQ Gateway breaker included
Production metering CT	200 A solid core of a mitalish and wired to 40 Galleway.
Consumption monitoring CT (CT-200-SPLIT)	A pair of 200 A split core current transformers
MECHANICAL DATA	

Untensions (Wathlet)	375* 405* In BOTH (1435 * 195" * 195"), Heart is 31 DC (55 5-21) with reputing Drocett.	
/eight	7.5 kg (16.5 lbs)	
millernt femillernt bre canbe	-40°C (5 446°C (4C°C) 135°F)	
ooling	Natural convection, plus heat shield	
Daniel deventerrande de sancier	Dariston, MFTEcerrified, NEWA type 5P, prizyparkunwar huramuchoe	
fire sizes	20 A to S0 A breakler inputs: 14 to 4 ANIG copper conductors 40 On breakler branch inputs; 40 10 ANIG copper conductors 4 Main lug combined outgot: 10 to 20 ANIG copper conductors Neutral and grounds: 14 to 1/0 copper conductors Neutral and grounds: 14 to 1/0 copper conductors	

UL 60601-1/CANCSA 22.2 No. 61010-

Compliance, IQ Gateway



DESIGNER: OSD

RESIDENCE **PERGANTIS** MICHAEL

14 JASON ST, ARLINGTON, MA 02476

nodem). Note that an Enpha

ARLIM1240B0002L0004B DATE:8/25/2023 APN:

S-3 SPEC SHEET SHEET

ENPHASE

SOLARMOUNT

"UNIRAC

SOLARMOUNT defined the standard in solar racking. Features are designed to get installers off the roof Systems can be configured with standard or light rail to meet your design requirements at the lowest cost faster. Our grounding & bonding process eliminates copper wire and grounding straps to reduce costs. possible. The superior aesthetics package provides a streamlined clean edge for enhanced curb appeal, with no special brackets required for installation.



SOLARMOUNT

#*UNIRAC

3000 EXECUTIVE PKWY CA 94583

PHONE # (877) 299-4943 STE 504 SAN RAMON, **LICENSE TYPE C10 LICENSE # 961988**

INTEGRATED BONDING MIDCLAMP

INTEGRATED BONDING SPLICE BAR

INTEGRATED BONDING L-FOOT w/ T-BOLT

DESIGNER: OSD

PERGANTIS MICHAEL

UNIRAC CUSTOMER SERVICE MEANS THE HIGHEST LEVEL OF PRODUCT SUPPORT

14 JASON ST, ARLINGTON, MA 02476

PORTS CONT

33

D

ENHANCED DESIGN & LAYOUT TOOLS Featuring Goegle Map Capabilities within U-Builder

LOSE ALL OF THE COPPER & LUGS SMALL IS THE NEXT NEW BIG THING Sylon grandleg trough legides reconvenies and trust cakes. Light Rail is fully Compatible with all SM Companied

FAST INSTALLATION. SUPERIOR AESTHETICS OPTIMIZED COMPONENTS . VERSATILITY . DESIGN TOOLS . QUALITY PROVIDER

APN:

SHEET

SPEC SHEET

RESIDENCE

ARLIM1240B0002L0004B DATE:8/25/2023

rateat your reputation with quality racking solutions backed by engineering excellence and a superior supply chain





FLASH LOC INSTALLATION GUID

> FLASHLOC is the ultimate attachment for composition shingle and rolled comp roofs. The all-in-one mount installs fast — no kneeling on hot roofs to install flashing, no prying or cutting shingles, no pulling nails. Simply drive the lag bolt and inject sealant into the base. FLASHLOC's patented TRIPLE SEAL technology preserves the roof and protects the penetration with a permanent pressure seal. Kitted with lag bolts, sealant, and hardware for maximum convenience. Don't just divert water, LOC it out!









With an outer sheld We controur-conforming pasket 2. Simply drive lag bolt and inject sealant into the port with presentable and inject sealant into the print the fingle-Lie Steal. To create a permanent pressure seal. LOC OUT WATER

Install a high-strength waterproof attachment without lifting, prying or damaging shingles. PROTECT THE ROOF



HIGH-SPEED INSTALL

Complete Solar

PHONE # (877) 299-4943 3000 EXECUTIVE PKWY STE 504 SAN RAMON, **LICENSE TYPE C10 LICENSE # 961988** CA 94583

BETTER SOLAR STARTS HERE



NOTE: Space mounts per racking system install specifications. When down pressure is ≥34 psf,

span may not exceed 2 ft.

Snap chalk lines for attachment rows. On shingle roofs, snap lines 1-3/4" below upslope edge

of shingle course. Locate rafters and mark attachment locations

At each location, drill a 7/32" pilot hole. Clean roof surface of dirt, debris, snow, and ice,

then fill pilot hole with sealant.

Place FLASHLOC over pilot hole with lag on down-slope side. Align indicator marks on sides of mount with chalk line. Pass included lag bolt and sealing washer through FLASHLOC into pilot

hole. Drive lag bolt until mount is held firmly in place.

NOTE: The EPDM in the sealing washer will expand beyond the edge of the metal washer when

proper torque is applied.

DESIGNER: OSD

RESIDENCE **PERGANTIS** MICHAEL

NOTE: When FLASHLOC is installed over gap between shingle or tabs or vertical joints,

Continue array installation, attaching rails to mounts with provided T-bolts.

fill gap/joint with sealant between mount and upslope edge of shingle course.

Use only provided sealant.

STEP 2: SEAL Insert tip of UNIRAC provided sealant into port. Inject until sealant exits both vents.

14 JASON ST, ARLINGTON, MA 02476

ARLIM1240B0002L0004B DATE:8/25/2023

S-5 SPEC SHEET SHEET

FASTER INSTALLATION. 25-YEAR WARRANTY.

FOR QUESTIONS OR CUSTOMER SERVICE VISIT UNIRAC.COM OR CALL (505) 248-2702

FASTER INSTALLATION. 25-YEAR WARRANTY.



Fwd: 14 Jason St - Solar application

2 messages

Amanda Kingsbury <ak@ecoloop.us>

Tue, Jan 16, 2024 at 10:39 AM

To: "carol.greeley@gmail.com" <carol.greeley@gmail.com>

Hello Carol!

Gabriel passed me your email, thanks for your help today over the phone.

We are working with Michael and Luba on a solar project for their houses at 14 Jason and 16 Jason, unfortunately their energy usage is really high and their roof has a lot of cuts, so to produce 100% of their energy, we had to use almost every surface available.

We are also doing a new roof for them, because the existing one is around 20 years old and needs to be replaced, the new shingles color will be black to blend better with the panels.

I'm sending attached the following:

- -Application for certificate signed by the homeowner
- -Picture of the front and side of the house
- -Planset with the design and the specs of the equipment that will be used
- -Location of the external equipment (inverter box and rapid shut down)

I didn't fill out the boxes because I wasn't sure which one to mark, but I'm happy to mark it after your review.

I'm sending the documents for 16 Jason separately in another email.



--

Amanda Kingsbury

Operations
ecoloop
M: 781.539.5027
ecoloop.us



--

Amanda Kingsbury

Operations ecoloop M: 781.539.5027 ecoloop.us





18 of AHDC 2-22-2024



14 Jason - Side.jpeg 149K



14 Jason - House front.png 7044K



Screenshot 2024-01-16 at 10.35.00 AM.png



14 Jason - App.pdf 381K



14 Jason Letter.pdf 310K

Carol Greeley <arol.greeley@gmail.com>
To: Amanda Kingsbury <ak@ecoloop.us>

Got it - thank you! - Carol [Quoted text hidden]

Carol Greeley, Executive Secretary

Arlington Historic District Commissions

(781) 316-3265

ahdc@town.arlington.ma.us

www.arlingtonhistoricdistrict.com

Tue, Jan 16, 2024 at 11:15 AM



Arlington Historic District Commissions

Application for Certificate

(Read attached instructions <u>before</u> completing form)

For Commission Use Only:
Date Rec:
Hearing Date:
Certificate #:
Monitor:

	ess – for work described herein
2 0	ect
	ility – for the following reason(s):
	to public view
	ce, repair, or replacement using same design and materials
1	hange specifically excluded from review under Bylaw
☐ Other:	
	nancial or otherwise and does not conflict substantially with purposes of the Bylaw
General Information:	
Property Address 16 Jason St	District
Owner(s) Michael Pergantis	Email Lubavolkova@yahoo.com
Owner's Phone (h)6172851145 (w)	(fax)
Owner's Address 14 Jason St	
Applicant (if not Owner) John F Carey/Complete So	lar
Applicant's Phone (h)5599679392 (w)	(fax)_
Applicant's Address 3000 Executive Pkwy Ste 504, S	an Ramon, CA 94583
Applicant's Relationship to Owner Contractor	
Contractor John F CArey / Complete Solar	Phone 5599679392
Architect	Phone
Dates of Anticipated Work: Start 11/1/2023	
the proposed work (if a change or addition) is h	onal pages as necessary) Please include a description of how istorically and architecturally compatible with the building
and the District as a whole.	
23 photovoltaic (PV) modules roof mounte	ed, 8.740 KWDC
Required Documentation Acknowledgements ✓ I acknowledge that I am required to provide s	: (see attached instructions) supporting documentation, including the attached "Supporting
Documents Checklist", by the deadlines indicate	ed in the instructions. I understand that if such documents ation will be considered to be incomplete and Commission
this application is accurate and complete. I a	the best of my knowledge, the information contained in also give permission for members of the AHDC to access s application and work done under any certificate issued
Owners Signature(s): Michael Pergartis	Date: 9/15/2023
Certificate Application (Revised January 2022)	







DAVID C. HERNANDEZ,

513-418-8812

4912 Prospect Ave., Blue Ash OH 45242



davehernandezpe@gmail.com



DATE: September 1, 2023

RE: 16 Jason St, Arlington, MA 02476

To Whom It May Concern,

As per your request, Exactus Energy has conducted a site assessment of the building at the above address.

PV solar panels are proposed to be installed on roof areas as shown in the submitted plans. The panels are clamped to rails which are attached to the roof with a lagged mounting system. The PV system (PV modules, racking, mounting hardware, etc.) shall be installed according to the manufacturer's approved installation specifications. The Engineer of Record and Exactus Energy claim no responsibility for misuse or improper installation.

It was found that the roof systems satisfactorily meet the applicable standards included in the Massachusetts State Building Code (9th Edition), 2015 IBC/IRC, 2015 IEBC, and ASCE 7-10 as well as the design criteria shown below:

Design Criteria:

Risk Category = 11 Exposure Category = B

Wind speed = 127 mphGround snow load = 40 psfRoof dead load = 9 psfSolar system dead load = 3 psf

Overall, the roof system integrity is adequate to support the PV alteration with no modifications or reinforcements as required per 2015 IEBC Sections 402.3 and 403.3

This letter was completed in accordance to recognized design standards, professional engineering experience, and judgement. Prior to installation, the on-site contractor must notify Exactus Energy if there are any discrepancies, or damages to the members, that was not addressed in the plan set.

If you have any further questions, please do not hesitate to contact me.

Acknowledged by:

David C. Hernandez Digitally signed by David C. Hernandez Date: 2023.09.01 07:36:09 -04:00



MICHAEL PERGANTIS RESIDENCE

NEW PHOTOVOLTAIC ROOF MOUNT SYSTEM PROJECT - 8.740 kW DC /

MICHAEL PERGANTIS

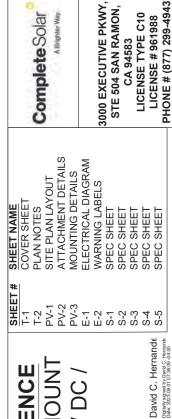
PROPERTY OWNER

PROJECT INFORMATION

COMPLETE SOLAR

CONTRACTOR NAME:

7.475 KW AC



LICENSE # 961988

CA 94583



MICHAEL PERGANTIS

RESIDENCE

16 JASON ST, ARLINGTON, MA 02476

APN: ARLIM1240B0002L0004A DATE:8/31/2023

COVER SHEET SHEET

42.415388, -71.158399 COORDINATES:

AERIAL VIEW

SINGLE FAMILY RESIDENCE

DESIGN SPECIFICATIONS

RESIDENTIAL

CONSTRUCTION TYPE: ZONING: WIND EXPOSURE:

EVERSOURCE ENERGY

UTILITY:

ARLINGTON TOWN

APPLICABLE CODES & STANDARDS
2015 INTERNATIONAL RESIDENTIAL CODE (IRC)
2015 INTERNATIONAL BUILDING CODE (IBC)
2021 INTERNATIONAL BUILDING CODE (IBC)
2021 INTERNATIONAL MECHANICAL CODE (IMC)
2021 INTERNATIONAL PLUMBING CODE (IPC)
2021 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)
2020 INTERNATIONAL ENERGY CODE (IRC)
2021 INTERNATIONAL FIRE CODE (IFC)

LINE SIDE TAP IN THE MSP TYPE OF INTERCONNECTION:

MASSACHUSETTS STATE BUILDING CODE (9TH EDITION)

ROOF MOUNT SCOPE OF WORK
TYPE OF SYSTEM:

SYSTEM SIZE:

STC: 23 X 380W = 8.740kW
PTC: 23 X 348.9W = 8.025kW
(23) SOLARIA POWERX-380R-2B(380W) [BLK] MODULE
(23) ENPHASE I G8M-72-2-US MICROINVERTERS
(1) 60A KNIFE AC DISCONNECT
(1) 60A FUSED AC DISCONNECT WITH 40A FUSES
(1) 125A ENPHASE IQ COMBINER 4/4C BOX

99 MSP UPGRADE: MAIN BREAKER DERATE:

RACKING & MOUNTING

PV ATTACHMENT TYPE: UNIRAC FLASHLOC FOR COMP SHINGLE ROOF

RACKING TYPE:

UNIRAC SOLARMOUNT - ROOF MOUNT RACKING HARDWARE



STE 504 SAN RAMON **LICENSE TYPE C10 LICENSE # 961988** CA 94583

3000 EXECUTIVE PKWY

PHONE # (877) 299-4943

- GROUNDING AND BONDING CONDUCTORS, IF INSULATED, SHALL BE COLORED GREEN OR MARKED GREEN IF #4 AWG OR LARGER [2022 CEC
- 280.119]
 THE ARGUNDING ELECTRODE SYSTEM COMPLIES WITH CEC 880.47 AND THE ARGUNDING ELECTRODE SYSTEM IS SYSTEM IS INACCESSIBLE. OR INADECUATE, A GROUNDING ELECTRODE SYSTEM PROVIDED ACCORDING TO CEC 280, CGC 869.47 AND AHJ.
 SROUND-EAULT DETECTION SHALL COMPLY WITH CEC 890.41 IN GENERAL AND CEC 890.41 (A)(1) SPECIFICALLY. .59
 - 1.60.

- .66
- 1.67.
- 1.70.
- 1.73.

- - .58
- **1.61.** 1.37. STRUCTURAL NOTES.
 1.38. RACKING SYSTEM.
 1.39. RACKING SYSTEM.
 1.30. FACKING SYSTEM.
 1.40. A MINIMUM DISTANCE BENOUD ETHER EDGE OF THE RARXYSUBARRAY.
 ACORDING TO RALL MANUFACTURERS INSTRUCTIONS.
 1.40. FACKING SYSTEM.
 1.40. FACKING SYSTEM

METERTERS, AND SOURCE CIRCUIT COMBINER BOXES ARE IDENTIFIED AND LISTED FOR USE IN HOTOTOLOLIZA'S VSTERIAS ARE COURTED AND LISTED FOR USE IN HOTOTOLOLIZA'S VSTERIAS ARE COURTED BY WEE 690. 4.1 CASS OF THE INVESTERS, U. 174 CACESSORY
CASS OF THE INVESTERS, U. 174 CERTIFIED, LEE 1547; 928, 519
CASS OF THE INVESTERS, U. 174 CERTIFIED, LEE 1547; 928, 519
CACORDINER BOX(ES), U. 173 OR U. 174 AACCESSORY
AND ACCORDING TO NEC 690.7
AL INVESTERS, PROTOVOLIZAC EVALUATED TAKEN TO CORDING TO NEC 690.7
AL INVESTERS, PROTOVOLIZAC EVALUATED TAKEN TO SOURCE CALCULATED ACCORDING TO NEC 690.7
AL INVESTERS, PROTOVOLIZAC MODILES, PHOTOVOLIZAC PAHOTOVOLIZAC POWER SYSTEM WILL BE INSTRALED AACCEORNG TO ANY INSTRUCTIONS FROM THE INSTRALED ACCORDING TO ANY INSTRUCTIONS FROM THE INSTRUCTIONS OF THE SOURCE CORDING TO BE IN ACCORDANCE WITH LOCAL BUILDING
CODE IF EXPOSED TO SUNLIGHT, IT SHALL BE UN RESISTANT. ALL PLACED IN ACCORDANCE WITH LOCAL BUILDING
CODE IF EXPOSED TO SUNLIGHT, IT SHALL BE UN RESISTANT. ALL

- 1.63. DISCONNECTS TO BE ACCESSIBLE TO QUALIFIED UTILITY PERSONNEL, BE LOCAGREL, AND BE A VISIBLE-BREAK SWING.
 1.64. RAPID SHUTDOWN OF ENERGIZED CONDUCTORS BEYOND 1 FT OF PV ARRAY OR 5 FT INSIDE A BUILDING WITHIN 10 SECONDS. CONTROLLED CONDUCTORS SOVAND 5:20V AND 5:20VA [CEC 690.12[8]], LOCATION OF LABEL ACCORDING TO AHJ.
 - 1.65. ALL OCPD RATINGS AND TYPES SPECIFIED ACCORDING TO CEC 690.8,
- 08.3 AND 30. USYED LABELED OR BOTH SHALL BE INSTALLED AND USED IN ACCORDANCE WITH ANY INSTRUCTIONS INCLUDED IN THE LISTING OK LABELING: CEC 1103.01. IN THE LISTING IF REQUIRED BY AHJ, SYSTEM WILL INCLUDE ARC-FAULT ORGUIT
- ELECTRICAL INTERCONNECTION NOTES: THE SUM OF THE UTILITY OCPD AND INVERTER CONTINUOUS INPUT MAY NOT **1.68**.

DESIGNER: OSD

PSH

Deposite of

- EXCEED 120% OF BUSBAR RATING.
 WHEN SUM OF THE PROYOUTCS EQUALS >100% OF BUSBAR RATING, PV
 BUDICATED BACKFEED BREAKERS MUST BE LOCATED OPPOSITE END OF
- THE BUS FROM THE UTILITY SOURCE COPD.

 AT MULTIPLE BY OUTPUT COMBINER PANEL. TOTAL RATING OF ALL OVERCUPRENT DEVICES SHALL NOT EXCEED AMPACITY OF BUSBAR. HOWEVER, THE COMBINED OVERCURRENT DEVICE MAY BE EXCLUDED. SUPPLY SIDE TAP INTERCONNECTION SHOULD BE WITH SERVICE ENTRANCE.

- SWITCH IS OPENED THE CONDUCTORS REMAINING ENERGIZED ARE CONNECTED TO THE TERMINALS MARKED "LINE SIDE" (TYPICALLY THE UPERF TERMINALS).

- 1.71. 1.72.
- BACKFEEDING BREAKER FOR UTILITY-INTERACTIVE INVERTER OUTPUT IS EXEMPT FROM ADDITIONAL FASTENING

BE RATED FOR SUCH USE.

153. PV EQUIPMENT SHALL BE GROUNDED ACCORDING TO NEC 6804.3 MONTH AND ACCORDING TO NEC 6804.3 MONTH AND ACCORDING TO NEC 6804.3 MONTH AND ACCORDING AND ENCLOSURES CONSIDERED GROUNDED IN ACCORD WITH 280.134 AND 280.136A.

155. GUIDMENT GROUNDING CONDUCTORS SHALL BE SIZES ACCORDING TO NEC 680.45 AND MICKONNER PRINKIPACHURES NORTHOUSEN GROUNDING TO SHALL BE SIZES ACCORDING TO NEC 680.45 AND MICKONNER PRINKIPACHURES INSTRUCTIONS.

GROUNDING NOTES: GROUNDING SYSTEM COMPONENTS SHALL BE LISTED FOR THEIR PURPOSE, AND GROUNDING DEVISES EXPOSED TO THE ELEMENTS SHALL

1.14. PV MODLIE, AND INVERTER INSTALLATION - SOLARIA POWERX-380R-28(380W)
[BLK] MODLIES I, ENPAREZ (108M-72.2-US MIGROINVERTERS.
1.15. PV GOLIPMENT GROUNDING
1.16. PV SYSTEM WIRNO TO A ROOF-MOLUTED JUNCTION BOX
1.18. PV LOAD CENTERS (IF INCLUDED)
1.19. PV DISCONNECTS
1.10. PV BRETERNIGAMONTORING (IF NOLLUDED)
1.119. PV DISCONNECTS
1.20. PV GROUNDING ELECTRODE & BONDING TO (E) GEC
1.21. PV FILE COMMISSIONING (IF NOLLUDED)
1.21. PV FILE COMMISSIONING (IF NOLLUDED)
1.22. SIGNAGE PLACED IN ACCORDANCE WITH LOCAL BUILDING CODE
1.53. SIGNAGE PLACE FOR INSPECTION IN COMPLIANCE WITH OSHA
1.54. SITE MOTES.
1.54. ALTE MOTES.

1.14. 1.15. 1.17. 1.18. 1.22. 1.22. 1.23. 1.25.

BATTERES.

THE SOLAR PY REAL ATION WILL NOT OBSTRUCT ANY PLUMBING, THE SOLAR PY ALL ATION WILL NOT OBSTRUCT ANY PLUMBING, THE SOLAR PARANICAL, OR BUILDING ROOF YEARS.

PROPER ACCESS AND WORKING CLEARANGE AROUND EXISTING AND PROPOSED ELECTRICAL EQUIPMENT WILL BE PROVIDED AS PER SECTION

1.28.

1.27.

REGULATIONS.
THE PV MODULES ARE CONSIDERED NON-COMBUSTIBLE AND THIS SYSTEM IS A UTILITY INTERACTIVE SYSTEM WITH NO STORAGE

ROOF COVERINGS SHALL BE DESIGNED, INSTALLED, AND MAINTAINED IN ACCORANACE WITH THIS CODE AND THE APPROYED MANUFACTURER'S INSTRUCTIONS SUCH THAT THE ROOF COVERING SERVES TO PROTECT THE BULLOING OR STRUCTURE.

SUITABLE WIRING CLIPS
AC CONDUCTORS COLORED OR MARKED AS FOLLOWS: PHASE A OR L1BLACK PHASE B OR L2. RED, OR OTHER CONVENTION IF THREE PHASE
PHASE C OR L3. BLUE, "YELLOW, ORANGE". OR OTHER CONVENTION
NEUTRAL. WHITE OR GREY IN 44WIRE DELIA CONNECTED SYSTEMS THE
PHASE WITH HIGHER YOLTAGE TO BE MARKED DORANGE [INC 110.15

1.50.

WORK INCLUDES:
PV ROOF ATTACHMENTS - UNITAC FLASHLOC FOR COMP SHINGLE ROOF.
PV ROCK SYSTEM INSTALLATION - UNITAC SOLARMOUNT ROOF MOUNT
RACKING HARDWARE

PRIME CONTRACTOR WILL BE RESPONSIBLE FOR COLLECTING EXISTING ON USITE RECUIREMENTS TO DESIGN, SPECIFY AND INSTALL THE EXTENDR ROOF-MOUNTED PORTION OF THE PHOTOVOLTAC SYSTEMS DETAILED IN THIS DOCUMENT. SCOPE OF WORK: PRIME CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND PRIME CONTRACTOR SERPONSIBLE FOR THE DESIGN AND PRECEITOATIONS OF THE GRID-TIED PHOTOVOLTAIC SYSTEM RETROFIT.

1.10.

1.8

EACH MODILE WILL BE GEONUNDED USING WEEB GROUNDING CLIPS AS SHOWN IN MANUFACTURER DOCUMENTATION AND APPROVED BY THE AH. IF WEEBS ARE NOT USED, MODILE GROUNDING LUGS MUST BE INSTALLED AT THE SPECIFIED GROUNDING LUGH CHES PER THE MANUFACTURERS INSTALLATION REQUIREMENTS. 1.56. .57.

1.32. WIRING SYSTEMS INSTALLED IN DIRECT SUNLIGHT MUST BE RATED FOR EXPECTED OPERATING TEMPERATURE AS SPECIFIED BY NEC 690.31 (A),(C)

THIS PHOTOTOTAL AND SYSTEM SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE (NEC) ARTICLE 699, ALL MANUFACTURERSS LISTING AND INSTALLATION INSTRUCTIONS. AND THE RELEVANT CODES AS SPECIFIED BY THE AUTHORITY HAVING JUSSIOSIOTIONS (HALL) APPLICABLE CODES. THE UTILITY NUTERCONNECTION APPLICATION MUST BE APPROVED AND PV SYSTEM INSPECTED PRIOR TO PARALLEL OPERATION CROID SHALL OPERATION (GPDI) DEVICE IS NUTERCONNECTIED FROM TO PARALLEL OPERATION (GPDI) DEVICE IS NUTERCROMENTED FROM TO PARALLEL OPERATION (GPDI) DEVICE IS

£. 4.

690.5(A) ALL PV SYSTEM COMPONENTS; MODULES, UTILITY-INTERACTIVE

1.5

1.6.

1.7.

EQUIPMENT LOCATIONS: ALL EQUIPMENT SHALL MEET MINIMUM SETBACKS AS REQUIRED BY NEC

13 AND INCE TABLES 310 46 (BILQL) AND 310 46 (BIQS)(C)

14 AND TON NAND PULL BOXER PERMITTED INSTALLED UNDER PV MODULES

15 ADDITIONAL AC DISCONNECTIS) SHALL BE PROVIDED WHERE THE

15 INVERTER IS NOT WITHIN SIGHT OF THE AC SERVICING DISCONNECT.

15 ALL COMPINIOR THAN LE BE THE SHALL BE PROVIDED WHERE THE

15 INVERTER IS NOT WITHIN SIGHT OF THE AC SERVICING DISCONNECT.

15 INVERTER IS NOT WITHIN SIGHT OF THE AC SERVICING DISCONNECT.

15 ALL COMPONERT SHALL BETTE FOR THEIR PURPOSE AND RATED FOR OUTDOOR USAGE WHEN APPOPRIATE.

THE GROUNDING CONNECTION TO A MODULE SHALL BE ARRANGED SUCH THAT THE REMOVALOR OF A MODULE DOES NOT INTERRUPT A GROUNDING CONDICTOR TO ANOTHER MODULE.

DISCONNECTION AND OVER-CURRENT PROTECTION NOTES: DISCONNECTING SWITCHES SHALL BE WIRED SUCH THAT WHEN THE

CONTRACTOR
ALL PV ELATED ROOF ATTACHMENTS TO BE SPACED NO GREATER THAN
THE SPAN DISTANCE SPECIFIED BY THE RACKING MANUFACTURER
144. WHEN POSSIBLE, ALL PV RETATED RACKING ATTACHMENTS WILL BE
STAGERED AMONGST THE ROOF FRAMING MEMBERS.

PROTECTION ACCORDING TO CEC 690.11 AND UL1699B

1.46. WIRING & CONDUIT NOTES: 1.46. LAL CONDUIT AND WITE WILL BE LUSTED AND APPROVED FOR THEIR PURPOSE. CONDUIT AND WITE WILL BE LUSTED AND ARE BASED ON MINIMUM COOP ERQUIFEMENTS AND PARE NOT MEANT TO LIMIT LIP SEZING. 147. CONDUITORS SIZED ACCORDING TO NEC 690.7. 148. OUT TAGE THOSE LIMITED TO INDICE. 149. DOWNING LIMITED TO MODDULE FOOTPRINT. MICROINVERTER WIRING SYSTEMS SHARE BLOCATED AND SECURED UNDER THE ARRAY WITH

MICHAEL PERGANTIS RESIDENCE

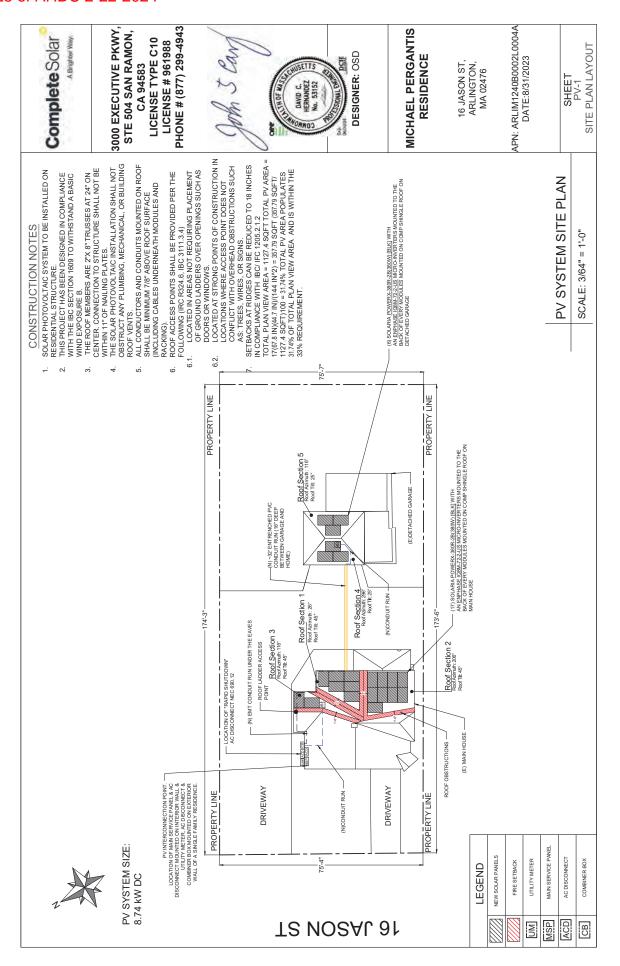
16 JASON ST,

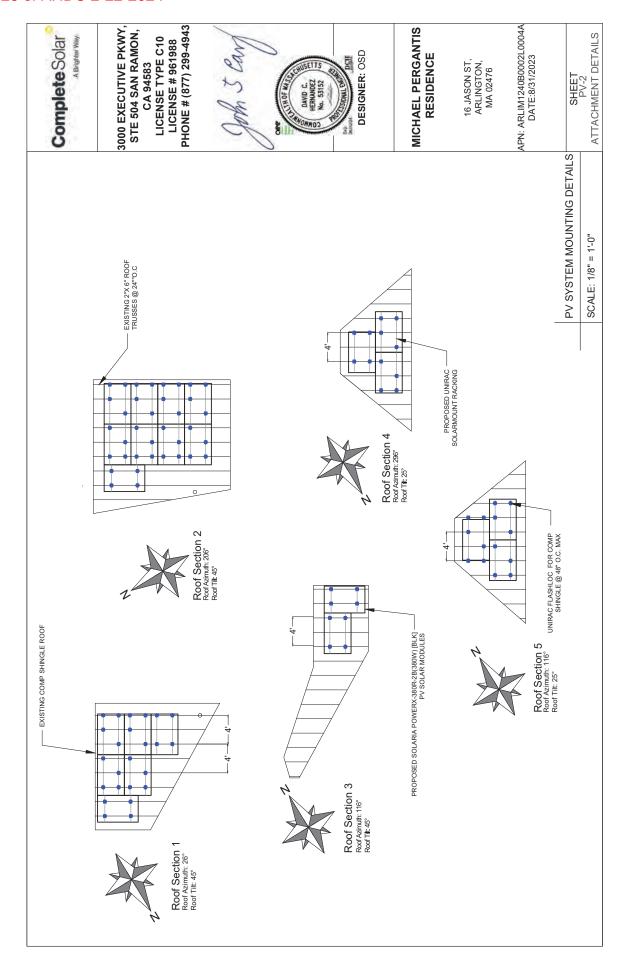
ARLINGTON, MA 02476

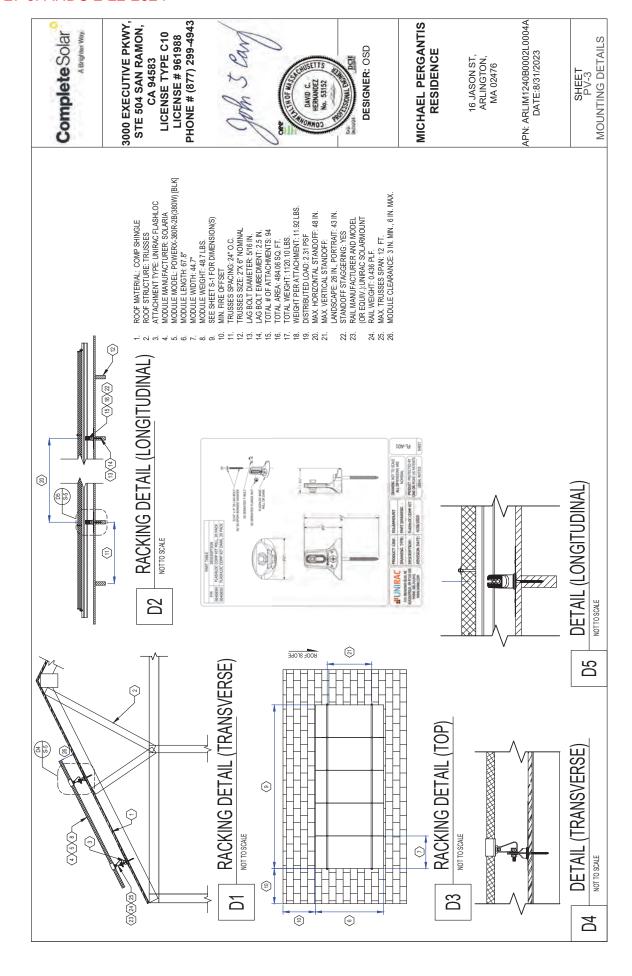
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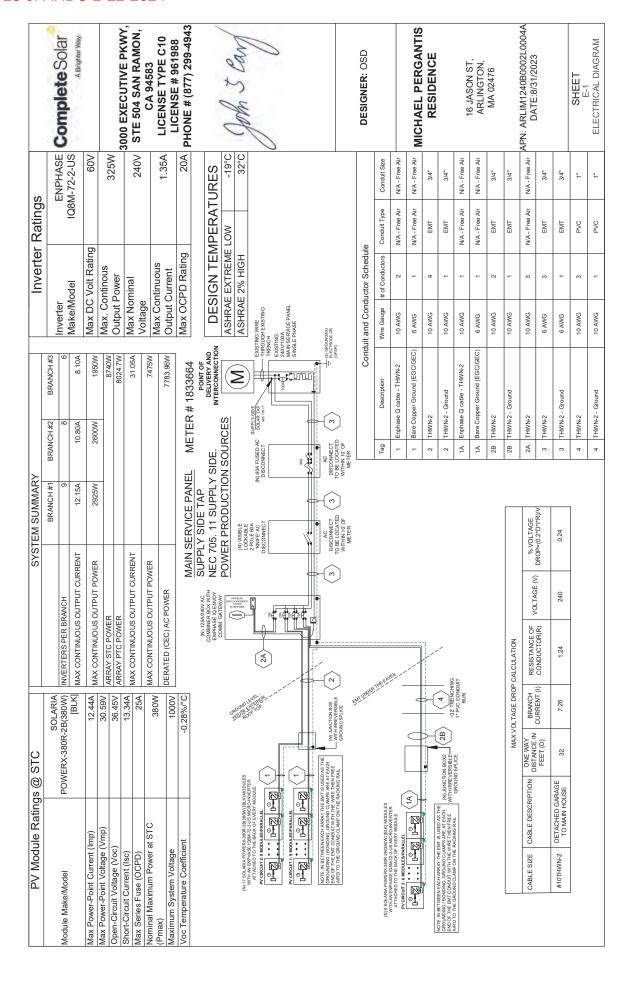
DATE:8/31/2023	SHEET

PLAN NOTES









POWER TO THIS BUILDING IS

FOLLOWING SOURCES WITH ALSO SUPPLIED FROM THE

DISCONNECTS AS SHOWN

(N) SOLAR PANELS AND MICRO-INVERTERS ON

3000 EXECUTIVE PKWY STE 504 SAN RAMON, **LICENSE TYPE C10**

WARNING

ELECTRICAL SHOCK HAZARD

TERMINALS ON LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION LABEL LOCATION:
INVERTER(S), AC
COMBINER PANEL (IF APPLICABLE).
PER CODE(S); NEC 2020: 690.13(B), 8,
706.15(C)(4)

RAPID SHUTDOWN SWITCH FOR SOLAR PV SYSTEM

LABEL LOCATION:
UTILITY SERVICE ENTRANCE/METER,
UTILITY SERVICE ENTRANCE/METER,
LOCAL AHJ, OR OTHER LOCATIONS AS REQUIRED
BY LOCAL AHJ,
PER CODE(S), NEC 2020: 590.56(c)(2)

WARNING

POWER SOURCE OUTPUT CONNECTION

DO NOT RELOCATE THIS OVERCURRENT DEVICE

LABEL LOCATION:
ADJACENT TO PV BREAKER (IF
APPLICABLE).
PER CODE(S): NEC2020: 705.12(B)(3)(2),

I WARNING

THIS EQUIPMENT FED BY MULTIPLE SOURCES. TOTAL RATING OF ALL OVERCURRENT DEVICES, EXCLUDING MAIN SUPPLY OVERCURRENT DEVICE, SHALL NOT EXCEED AMPACITY OF BUSBAR

LABEL LOCATION: MAIN SERVICE PANEL (IF APPLICABLE). PER CODE(S): NEC 2020: 705.12(B)(3)(3)

COMBINER PANEL DO NOT PHOTOVOLTAIC SYSTEM ADD LOADS

PHONE # (877) 299-4943

16 JASON ST

LICENSE # 961988

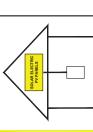
CA 94583

LABEL LOCATION: PHOTOVOLTAIC AC COMBINER (IF APPLICABLE).

240.0 VAC MAXIMUM AC OPERATING CURRENT: 31.05 AMP PHOTOVOLTAIC AC DISCONNECT NOMINAL OPERATING AC VOLTAGE: LABEL LOCATION:
AC DISCONNECT(S), PHOTOVOLTAIC SYSTEM POINT OF INTERCONNECTION. PER CODE(S): NEC 2020: 690.54

SOLAR PV SYSTEM EQUIPPED WITH RAPID SHUTDOWN

POSITION TO SHUT DOWN PV SYSTEM AND REDUCE SHOCK HAZARD IN THE TURN RAPID SHUTDOWN SWITCH TO THE "OFF"



LABEL LOCATION:
ON OR NO MORET BAY 3M (10 FT) FROM THE SERVICE DISCONNECTING
ON OR NO MORET BAY SYSTEMS ARE CONNECTED
PER CODE(S): NEC 2020: 690.56(C), NEC 2017: 690.56(C)(1)(a)

DESIGNER: OSD

PV INTERCONNECTION POINT, LOCATION OF-MAIN SERVICE PANEL, UTILITY METER, TWO AC DISCONNECTS & COMBINER BOX.

RESIDENCE

SHEET

MICHAEL PERGANTIS

16 JASON ST, ARLINGTON, MA 02476

APN: ARLIM1240B0002L0004A DATE:8/31/2023

REQUIREMENTS WITH LOCA. A HJ BEFORE INSTALLATION
ALL PAGUES AND SIGNINGE REQUIRED BY THE UTIEST DITTON OF THE WITHOUGH ELECTRICAL CODE
ALL PAGUES AND SIGNINGE PLACARD SHALL BE METALLIC OR PLASTIC, ENGRAND OR MACHINE
THE WITHOUT BETTEN A CONTRIBUTION COLON THE PLACIDE. THIS PLACINE WILL BE ATTICHED BY POP
PRETED ESTENS OR SOFTENS THOUGH THE PLACIDE. THIS PLACINE WILL BE ATTICHED BY POP
PRETED SIGNING THE LETTEN HEACH, ALL CHAPILL LITERS, ARALL OR SIGNING THE LETTER RING.
MINIMAM, 98 'LETTEN HEACH, ALL CHAPILL LITERS, ARALL OR SIMLAR FORM, NON BOLD, REFLECTIVE
WITHOUGH THE RESISTANT ANTERIAL SUTRILE FOR THE BUNKTOWNERM.

NOT ALL PLACARDS SHOWN MAY BE REQUIRED BY LOCAL AHJ. CONTRACTOR TO VERIFY PLACARD

PERMANENT SIGNAGE NOTES:

WARNING LABELS

SOLARIA

Solaria PowerX | DC Panel

Achiening over 19.4% efficiency, Solasia PowerX Performance solar panels teature Solariais core cell surfing retruelogy, offering higher-power and atmosther black-on-blacks assistences compared to conventional solar panels. Solaria has been the rankel leader in cut-cell teachinologies for over a decade. With a comprehensive 25-year warranity. PowerX delivers the lates in power and relability for home-owners.



watts and 19.4% efficiency, Solaria PowerX solar panels

High Efficiency, High Power

are one of the highest power residential panels available.

High Quality and Reliability

State of the art cell cutting technology and advanced panel construction ensure that PowerX panels are highly reliable and designed to far exceed the industry-leading 25-year



All Black Aesthetics



Improved Shading Tolerance

owers the shading losses and boosts energy yield.



Low Light Performance

PowerX maintains high efficiency at low

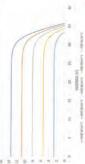
SOLARIA

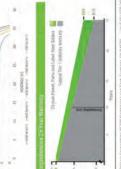
Solaria PowerX-380R-2B



Efficiency
Open Circuit Voltage (Voc)
Short Circuit Carrient (Im)
Max Power Voltage (Vno)
Max Power Current (Imp)
Power Tolerance

Max Power (Pmax)	[W]	283
Open Circuit Voltage (Voc)	M	33.9
Short Circuit Current (list)	[V]	10.86
Max Power Voltage (Vmp)	M	28.40
Max Power Current (Ino)	M	6.97
Temperature Characteristics		
NOCT	[Jul]	45+/-2
Temp. Coeff. of Priax	[2°/%]	-0.36
Temp. Coeff. of Voc	[3, / %]	-0.28
Temp. Coeff. of Isc	[3,/%]	0.048
Design Parameters		
Operating temperature	[od]	-40 to +85
Max System Voltage	M	1000
Max Fuse Rating	[A]	25
Bypass Diodes	(#)	en



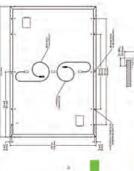


Complete Solar

LICENSE # 961988 PHONE # (877) 299-4943 3000 EXECUTIVE PKWY STE 504 SAN RAMON, **LICENSE TYPE C10** CA 94583



25 years*	The second live and in case of the	Vertical / Palletized 31 69,5" x 44,3" x 50,0" 1765mm x 1125mm x 1270mm	692 kg / 1525 lbs 26 806	1
Fife Type (UL 1703) Power, Parts & Labor Wartacity 'memory desira at men soutes com-	Packaging	W x H)	Pallets Weight Pallets / 40-ft Container Panels / 40-ft Container	



MICHAEL PERGANTIS RESIDENCE

16 JASON ST, ARLINGTON, MA 02476

DESIGNER: OSD



APN: ARLIM1240B0002L0004A DATE:8/31/2023

SPEC SHEET SHEET S-1





IQ8 Series Microinverters

- Lightweight and compact with plug-n-play connectors

Easy to install

High productivity and reliability Produce power even when the grid is down*

More than one million cumula hours of testing

Class II double-insulated

Optimized for the latest high

powered PV modules Microgrid-forming

Faster installation with simple two-wire cabling

Power Line Communication
(PLC) between components





CERTIFIED

Complies with the latest advanced grid support** Remote automatic upor the latest grid requirer

Configurable to support a wide range of grid profiles
 Meets CA Rule 21 (UL 1741-SA)
 requirements

IQ8 Series Microinverters

(N2UT 2ATA (0C)		108-86-2-113	18891,85-72-2-05.	1988-72-2-05	10EA-72-2-45	94-3-5-15 SH-2-25-15 SH-2-2-15 SH-2-2-15 SH-2-2-15 SH-2-2-15 SH-2-3-2-15	-3.0°2-272-25-0001
Commonly used module painings!	<i>M</i> -	235-350	235-440	280 - 480	296-500	320 - 540*	- 250 - 200 ·
Wedule compatibility		60-cell/120 had-cell	96	3-cell/120 half-cell, 6	6-cell/132 half-cells	90-cell/T20 half-cell, 86-cell/T32 half-cell and 72-cell/144 half-cell	
MPPT voltage range	>	27-37	29-42	33-46	36-45	38-45	38-45
Operating range	>	25-48			225-58		
Min/max start voltage	*	30/48			30/58		
Max ingrut DC voltage	*	200			09		
Max DC current! [module lac]	*			N.	in		
Overvollage class DC port				٥			
DC port backfeed current	.1			0			
PV smay configuration		ty Ungrounded ar	day; No additional DC	side protection requ	med, AC side protect	bit Ungrounded sire; No additional DC side protection required; AC side protection requires max 20th per branch circuit	er branch cirous
SINTRELLY MANA LACT	ı	HER ARCTOR	Stranger of the stranger of th	1444 TR-3-119		the state of the s	INDIA MATERIAL

LICENSE # 961988 PHONE # (877) 299-4943

3000 EXECUTIVE PKWY, STE 504 SAN RAMON, **LICENSE TYPE C10**

CA 94583

		108-88-2-03	106FLUS-72-2-US	1067LUS-72-2-US 148H-72-2-US	100 A - 72 - 2- US	1084-240-72-2-15 1284-208-72-2	108H-208-72-E-
Jan	NA.	245	300	330	368	384	300
subput power	8	340	280	325	340	- 280	380
oltage/range*				240 / 211-264			206/183-25
cuttout current	4	10	5	587	146	158	673
Act	2			99			
BRICK FROME	至			80-08	99		
fault current over	1			N			2
A (L-L) branch circuit*		8	12	e	H	9	a
distortion				P	*		
as AC port							
dourant	×			X			
ting				01	à		
factor (adjustable)				C/85 leading -	ading - 0.85 lagging		
		975	97.6	97.6	92.6	97.6	97.4
Molency		87,	46.	187	87.8	28	18
-							

Ambient temperature range	(4-04) 51 4-04-13 (1-40-4) 64-140-14
Relative humidity range	47% to 100% (condensing)
DC Connector type	MC4
Dimensions (H4WAD)	212 mm (8.57) x (78 mm (6.97) x 30.2 mm (1.2*)
Weight	1,08 kg (2,38 lbs)
Cooling	Mahural convestion - no fana
Approved for vert logations	- A
Pollution dages.	204
Endicaire	Class it double-resultand, corresion resultant polyment sector
Establish and months of 100 assessment addition	MITHAL Town & January

This product is UL Listed as PV Bapid Shut Down Equipment and conforms with MEC 3044, MEC 2017, and MEC 3020 section. 690102 and CZ21-2008 Rule 4-218 Rapid Shutdown of PV Systems, for AC and DC conductors, when makind exconding to

DESIGNER: OSD

MICHAEL PERGANTIS RESIDENCE

16 JASON ST, ARLINGTON, MA 02476

APN: ARLIM1240B0002L0004A DATE:8/31/2023

SHEET S-2 SPEC SHEET

Enghase Networking



The Enphase IQ Combiner 4/4C with Enphase modern (included only with IQ Combiner 4C) providing a consistent, pre-wired solution for microinverters and storage installations by residential applications. It offers up to four into a single enclosure and streamlines IQ consolidates interconnection equipment 10 Gateway and integrated LTE-MT cell

2-pole input circuits and Eaton BR series

busbar assembly.

- Includes IQ Gateway for communication and control includes Enphase Mobile Connect cellular modem (CELLMODEM-M1-06-SP-05), included only with IQ
- Combiner 4C

 . Includes obar shield to match Enphase IQ Battery
 aesthetics and deflect heat

 . Flexible metoricing augmonts Wi-Fr.

 Ethernet, or cellular

 . Optional AC receptacle available for PLC bridge

 . Provides production metering and consumption
 monitoring

一門を

- Simple
- stud mounting
 Supports bottom, back and side conduit entry
 Up to four 2-pole branch circuits for 240 VAC
 plug-in breakers (not included)
 80A total PV or storage branch circuits

Reliable

- Durable NRTL-certified NEMA type 3R enclosure
 Five-year limited warranty
 Way years labor reinhursement program coverage
 included for both the IQ Combiner SKU's
 UL listed



offerings, visit enphase.com

Enphase IQ Combiner 4/4C

biner 4 (X-IQ-AM1

(4-4)	(I) Continue at with Engleweil Cli dissevery printed circuit board for integrated reviewer gridals Ps/production metering (ANS) CIC, 20 + 6-50 jail de contramption membering (P-12-50), leculates a titler polar drived to match the ID Battery system air CIC, 20 years Commission 2 and to defect thest.
0-45)	(IQ Develore of 2, in Moher Police person relation) (IQ Develore of 2, in Moher Police person relation) (ANS TIZ2 N + 0.5) and color methods (IANS TIZ2 N + 0.5) and color translations (IANS TIZ2 N + 0.5) and the object cut incolor translation systems up to SET incolorements. (IANS TIZE N + 0.5) and the object cut incolor translations (IANS TIZE N + 0.5) and the object cut incolorements. (IANS TIZE N + 0.5) and the object cut incolorements (IANS TIZE N + 0.5) and the object cut incolorements (IANS TIZE N + 0.5) and the object cut incolorements. (IANS TIZE N + 0.5) and the object cut incolorements (IANS TIZE N + 0.5) and the object cut incolorements.

3000 EXECUTIVE PKWY, STE 504 SAN RAMON, **LICENSE TYPE C10**

CA 94583

ACCESSORIES AND REPLACEMENT PARTS	(not included, order separately)
Ensemble Communications (its COMMS-CELIMODEM-AN-186 CELIMODEM-AN-166 CELIMODEM-AN-166 SPL-05 CELIMODEM-AN-164-165	Inscription COMMON RT COT and CELLANCERA ALT ON GOOD TO THE THE PROPERTY CONTRICTION OF THE THE PROPERTY CONTRICTION OF THE THE PROPERTY CONTRICTION OF THE
Circuit Breakers Belt-Da. 240v Belt-Ca-240v Belt-Ca-240v Belt-Ca-260v	Check Problems (2004) 15 (1920) 15 (
EPLC-01	Power line carrier (communication bridge pair), quantity - one pair
XA-SOLARSHELD-ES	Replacement solar shield for IQ Combiner 4/4C
XA-PLUS-126-3	Accessory receptable for Pures Line Carries in 10 Combiner 4.44C irequired for EPLC-01)
XA-ENV-PGBA-3	Replacement IQ Cateway printed circuit board (PCB) for Combinar 4/4C
X-IQ-NA-HID-125A	Hold down kit for Eaton circuit breaker with scheve.

LICENSE # 961988 PHONE # (877) 299-4943

ELECTRICAL SPECIFICATIONS	
Rating	Continuous duty
System voltage	120/240 VAC, 60 Hz
Eason BR series busbar rating	125.A
Max. continuous current fasing	65.A
Max. continuous current rating (input from PV/storage)	64.A
Max. fuse/pirpuit rating (output)	90 A
Branch circuits (solar and/or storage)	Up to four 2 pale Eaton BR series Distributed Generation (DG) breakers only (not included)
Mire. total branch circuit breaker rating (input)	80A of distributed generation / 95A with 1Q Gateway breaker included
Production metering CT	200 A solid core pre-installed and wired to IQ Gateway
Consumption monitoring CT (CT-200-SPLIT)	A pair of 200 A spit core current transformers
MECHANICAL DATA	
Dimensions (WathAD)	37.5 x 49.5 x 16.8 cm (14.75" x 19.5" x 6.63"), Height is 21.06" (535 cm) with mounting brackets.

Dimensions (Wich(cD))	37.5 x 49.5 x 16.8 cm (14.75" x 19.5" x 6.63"). Height is 21.06" (53.5 cm) with mounting brackets.
Weight	7,5 kg (16,5 lbs)
Ambient temperature range	-40° C to +46° C [-40° to 715° f]
Cooling	Natural convection, plus heat shield
Enclosure measuremental enting	Gutdow, NRTL-certified, NEMA type 39, polyrenformte construcien.
Wire skrass	 20 A to 50 A breaker inputs: It to Advid copper conductors with the transfer inputs: 10 A to 64 Med copper conductors with ingo positioned output; 10 to 270 Advid copper conductors where it may also your 64 bit 10 a 270 Advid copper conductors where the allowed the Violence of the Copper conductors Advanta follow local codes requirement for conductors strong,
Amnute	To 2000 meters (6,560 feet)
INTERNET CONNECTION OPTIONS	
Minegrated We-Fi	-802.11b/g/n
Cethiar	CBLIMODEMAMI-06-SP-05, CELLMODEM MT-06-AT-05 (4G based LTE-MT cellular modern). Note that a

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- Contract	Othernet	COMPLIANCE	Compliance, 10 Combines	Compliance, IQ Gateway
Mobile Connect celtular modern is required for all Ensemble initialistons.	Optional, 802.3, CatSE (or Cat 6) LTP Ethernet cable (not included)		Lu 1741, CAN/CSA C2.2 No. 1071, 37 CPR, Pert 18, Chees B. ICES 603 Production meterning. AMSI C12.20 accuracy shass 0.5 (PV production) Consumption metering, accuracy class 2.5	UL 60601-1/CANCSA 22.2 No. 61010-1

ENPHASE

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S-3 SPEC SHEET

SHEET

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SOLARMOUNT defined the standard in solar racking. Features are designed to get installers off the roof Systems can be configured with standard or light rail to meet your design requirements at the lowest cost possible. The superior aesthetics package provides a streamlined clean edge for enhanced curb appeal, with laster. Our grounding & bonding process eliminates copper wire and grounding straps to reduce costs. no special brackets required for installation.





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ENHANCED DESIGN & LAYOUT TOOLS Featuring Geogle Map Capabilities within U-Builder

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SPEC SHEET SHEET

CompleteSolar

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fast — no kneeling on hot roofs to install flashing, no prying or cutting shingles, no pulling nails. Simply drive the FLASHLOC is the ultimate attachment for composition shingle and rolled comp roofs. The all-in-one mount installs lag bolt and inject scalant into the base. FLASHLDC's patented TRIPLE SEAL technology preserves the roof and protects the penetration with a permanent pressure seal. Kitted with lag bolts, sealant, and hardware for maximum convenience. Don't just divert water, LOC it out!











interr-conforming gasket 2 S inter 3 the Triple-Loc Seal In

FASTER INSTALLATION. 25-YEAR-WARRANTY.

INSTALLATION GUIDE

BETTER SOLAR STARTS HERE

PRE-INSTALL

Snap chalk lines for attachment rows. On shingle roofs, snap lines 1-3/4" below upslope edge of shingle course. Locate rafters and mark attachment locations.

At each location, drill a 7/32" pilot hole. Clean roof surface of dirt, debris, snow, and ice, then fill pilot hole with sealant. NOTE Space mounts per racking system install specifications. When down pressure is £34 pst. span may not exceed 2 ft.





Place FLASHLOC over pilot hate with lag on down-slope side. Align indicator marks on sides of mount with chalk line. Pass included lag bolt and sealing washer through FLASHLOC into pilot hole. Drive lag bolt until mount is held firmly in place. NOTE: The EPDM in the sealing washer will expand beyond the edge of the metal washer when proper torque is applied.

STEP 2: SEAL

Insert tip of UNIRAC provided sealant into port. Inject until sealant exits both vents. Continue srray installation, attaching rails to mounts with provided T-bolts. NOTE: When FLASHLOC is installed over gap between shingle or tabs or vertical joints. fill gap/joint with sealant between mount and upslope edge of shingle course.

Use only provided sealant

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S-5 SPEC SHEET SHEET

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